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THE HIGH-SCHOOL AGE

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EDUCATION FOR SOCIAL EFFICIENCY



Girls in their Early Teens are Often Taller than Boys the Same Age or Even Older. Both these Children are Fourteen Years Old.

THE SCHOOL AGE

by
NG KING

Professor of the State University of Iowa

GOOD AND YOUTH SERIES

by M. V. O'SHEA

Professor of Education, The University of Wisconsin

CHICAGO
THE MERRILL COMPANY
PUBLISHERS



Girls
Age or E.

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Professor of Education, The University of Wisconsin

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EDITOR'S INTRODUCTION

Probably most people appreciate that a human being in his progress from birth to maturity passes through certain ages or epochs, each characterized by peculiar tendencies and activities. If one should ask a man whose business it is to study human nature for practical reasons which of these epochs is of the greatest importance, he would undoubtedly say the period of the teens. He would probably declare that during this period the individual is being molded into final form in body and mind, and that whatever impressions can be made upon him at this time will be likely to be permanent. People are beginning to take this view; for during the last few years much has been said by observers and investigators respecting the chief characteristics of this period. All have noted the appearance of new interests and activities, and the development of extreme sensitiveness to various influences which have been practically unnoticed up until this time. The views of the practical man of affairs and the scientific student of mental development have been in accord with the views of the poets, who never tire of describing the freshness and enthusiasm and abounding vigor, as well as the excesses and the strains and stresses of this age.

In planning the series on *Childhood and Youth*, it was provided that much attention should be given to a practical discussion of the epoch covered substantially by the high-school period. The present volume is devoted wholly to an exposition of the characteristics and needs of the high-school age. Professor King has presented in simple, straightforward language most of the more important re-

EDITOR'S INTRODUCTION

sults of modern investigations regarding the physical changes which take place during the early teens, and the intellectual and emotional developments which occur parallel with the physical changes, or follow after them very closely. He has also discussed questions pertaining to the development of fundamental impulses in both boys and girls, and the educational problems which issue therefrom. He has considered questions of health and school work, and practical matters pertaining to the conservation of the energies of high-school pupils, and making their work in the school more efficient than it has been in the past. He has introduced a considerable amount of new and concrete material which bears directly upon the every-day life of the high-school pupil, in respect alike to his studies and to his conduct within and without the school. He has dwelt especially upon the development of the self during the teens, and he has shown that in effect the individual has a sort of new birth during this epoch—the birth of the spirit which is as important as the first birth of the body. An appreciation of this vital transformation during the teens will aid the teacher and the parent to understand and deal the more wisely with the boy or the girl who is passing rapidly from childhood to maturity.

There is probably no period in the individual's development when he has so many conflicts with adults as during the early teens. When he is changing so rapidly in body and mind, his individuality suddenly looms up in home and school; and it often arouses antagonism in parents and teachers. The reading of this volume should help any one charged with the training of youth to see what activities of either the boy or the girl are normal during this

EDITOR'S INTRODUCTION

epoch, and so should be encouraged or at least not opposed. On the other hand, there are dangers if the individual be let follow his own plans without direction from any source. Professor King makes this apparent in his discussion of the instability of many adolescent boys and girls, and their need of wise instruction, which should not be obtrusive or offensive, but which should nevertheless be effective.

The book is designed for students of human nature and education, and also for those who are responsible for the care and culture of boys and girls during the period of the teens. It is a book of interpretation of phenomena in the first place, and one of counsel and guidance in the second place. It is written in the spirit of modern science, and so is modest and reasonable. It is written also with a view to assist the practical trainer of youth, and so the discussion centers around those aspects of development and of education which are of chief interest and importance in the home and in the school.

M. V. O'SHEA.

Madison, Wisconsin.

PREFACE

No period of life has been so celebrated in literature as has the period of youth, or adolescence. Nor is it a time which has interested only the poet and the story writer; the scientist, also, in his search for new fields for investigation finds in youth as many problems as he may well desire. There is no season in the life of the boy or girl which, to parent and teacher, is more interesting and more baffling than are these years which we may roughly consider as lying between thirteen and twenty. Certainly no period of life is more apt to be misunderstood by older people than is this; nor is there an age upon which, in the name of science, greater extravagancies of thought and more exaggerated assertions have been lavished.

In fact, so little do we know definitely regarding the nature of the changes of boys and girls, as they pass through youth, that we may still too easily yield to the temptation to make large use of the finely wrought phrases of the poet when we think and talk of this spring-time of life. However, it is by no means certain that the student of adolescence should entirely ignore the literary interpretations. For while the poet may yield to the impulse to become the maker of exaggerated phrases, it is yet possible that he has an understanding of the heart of youth that the scientist will never get if he sticks to his technical descriptions and to his bald tables of statistics.

The purpose of these pages is to lead to a study of the period of youth, especially in its school and social relationships. While we shall in every case hope to present facts, our method will not be con-

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fined to that of abstract science but will make use of sympathetic description as well. We shall hope, if it may be possible, to picture the real boys and girls of the teens and specifically of the high school with the direct purpose of determining how school work may be more fully adjusted to their needs.

Modern civilization has not been so successful in dealing with the problem of childhood as it has been in the extraction of gold from the rocks or in the building of battle-ships. Possibly our age is more intelligent in regard to its children than the world of a century ago was. As to that we can not say. We only know that we are not so successful as we should be, compared with our advances in other lines of endeavor. A superficial interest in childhood is shown in the vast sums spent in education, but there is general lack of interest in those finer adjustments of the educational process which are absolutely essential to their real efficiency. It is much easier to induce the legislature of a farming state to appropriate fifteen thousand dollars for the study and prevention of hog cholera than to induce it to give a single dollar for the study and prevention of immorality among its boys and girls. Corn and hogs, stocks and bonds, seem to loom large in the minds of the masses, while the problem of child-welfare can take care of itself. We are slow in casting off completely the doctrine of *laissez-faire*, the "let-alone-and-it-will-take-care-of-itself" doctrine of the older economists. But less and less can the problems of child-welfare be let alone. In fact, the policy of neglect has not a single prop to support it in the intense life of the modern world.

And yet the American public is interested in the education of its children. Its interest, however,

PREFACE

finds expression chiefly in certain of the grosser and more obvious phases of equipment. Much remains to be done along the lines of fine discriminating adaptation to the physical, mental and social characteristics of boy life and girl life. It is the purpose of the following pages to point out some of the more needful adaptations of this type. The matter has been presented, as far as possible, in non-technical language. The author has purposely attempted to draw largely from general literature in his quotations rather than to depend exclusively upon the observations of professed psychologists. The resulting treatment may be lacking in the technique of the scientist, but it is believed it will be of more immediate value to parent and teacher.

I. K.

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THE HIGH-SCHOOL AGE

THE HIGH-SCHOOL AGE

CHAPTER I

WASTE IN THE HIGH SCHOOL

RECENT extensions of public education have nowhere been more striking than in those phases which deal with children in the period of puberty and early adolescence. The rapid development of public high schools, and of the various types of vocational schools, is a striking proof of the concern felt by the country in its citizens-soon-to-be.

However, the vast development of the machinery of education has not as yet been accompanied by **Evidence of a lack of fine adjustment** a corresponding development of ability to reach all boys and girls of this age. And, furthermore, those whom the school does reach fail, in large degree, to advance far enough in their courses even to enter the special courses and special schools which have been prepared for them. Could some of this loss be prevented by a better understanding of the boys and girls themselves? It is the conviction of the author that this might very well be.

The education of boys and girls in their teens

will be effective only in proportion to our accurate understanding of their characteristics and their needs.

We shall, in the pages that follow, for convenience and brevity commonly use the term youth to designate the years from thirteen to twenty, and thus include both the time of puberty and that of early adolescence.

In taking up the study of youth it is important first of all to know where the children of this age are to be found. On this point **Where are the children in their teens found?** we can speak only roughly. It is probably true in most localities that the larger number of them are not in school at all beyond the fourteenth year and many have dropped out before that time. Thus, from figures published for Philadelphia for 1908, (1)* there were on a given date actually in school a little over 15,500 twelve-year-olds; 14,200 thirteen-year-olds. These children were nearly all scattered through the eight grades below the high schools. Of the fourteen-year-olds, the number dropped to 8,900, of whom about 1,200 were in high school; of the fifteen-year-olds, there were 4,500 in school, of whom about 1,400 were attending high school. Of the sixteen-year-olds only 3,100 were in public schools—a group barely one-fifth as large as that of the twelve-year-olds. While we should not con-

*Figures in parentheses refer to authors cited at the ends of the chapters.

clude that exactly one-fifth of the fifteen and sixteen-year-olds were all of those ages left in school, it is safe to say that a large proportion of the sixteen-year-olds had actually dropped out. We can infer from these figures that, in the middle and crucial years of youth, the bulk of the boys and girls are not in school and that a large number of those who are in school are yet below the high-school grade, where they normally belong. Take the fifteen-year-old group; all of these should if they had made proper progress be ready by that time for high school, but out of forty-five hundred who have remained in school only fourteen hundred have attained that degree of advancement. These figures from Philadelphia are probably fairly typical of conditions in all large cities and to a degree of smaller cities and towns. (2) They throw into clear relief two points, which we ever need to bear in mind: the first, that boys and girls in the period of youth are by no means all in school; and the second, of those in school only a small proportion are actually as far advanced in their grades as they should be.

We are thus at the outset brought face to face with the need of just such a study as that which

**A challenge for
thought in these
conditions**

we here propose. There is a challenge for thought in the fact that large numbers of boys and girls are not in school at all in the crucial years of youth and of those who are in school, so many fall

short of those grades of work which are ordinarily supposed to meet the needs of this period of life. In a word, it is evident that our great public education machinery is failing absolutely to reach large numbers of children in this most interesting and most important period of mental and physical development, for, as we have seen in Philadelphia in 1908, the large majority, by far, of the pupils between twelve and eighteen who were in school at all were in the elementary grades rather than in the high schools.

In answer, then, to the question—where are the adolescents? (using the term broadly) we can say that a large number are not in school at all and, of those in school, the great majority do not reach the high school, and of those reaching the high school from one-half to nine-tenths drop out without finishing.

Many causes, to be sure, cooperate to produce this wide distribution through the grades of the boys and girls in their teens. A fairly large number are slow mentally and could not under any circumstances get through the grades of the public school, as those grades are at present laid out. It is possible, however, that a part of the failure of the school to reach the youth is due to lack of adjustment of the school to the peculiar needs of this period.

This possible lack of adaptation is strikingly suggested by the rapid rate at which pupils drop out

The high school does not hold its pupils of high school. In a study made in New York City, of one thousand high-school pupils it was found that one-fourth of those entering did not stay longer than one semester; over one-third stayed a year or less and one-half did not stay two years.(3) Smaller cities would probably make a better showing. Thus, in a city of ten thousand in Iowa, in the case of a class entering in 1908, about one-fourth dropped out by the end of the first year and one-third stayed only two years or less. In this same city twenty-three successive classes were studied with reference to elimination. A total of one thousand and forty-two pupils in these classes entered high school, and of these four hundred ninety-one graduated and five hundred fifty-one dropped out before completing the work. Of the boys there were four hundred eighty-three, of whom fifty-five per cent. dropped out without finishing; of the girls there were five hundred fifty-nine, of whom nearly fifty-one per cent. were eliminated.

The following table shows the percentage of elimination by years in high school of these five hundred fifty-one pupils:

TABLE I
PERCENTAGES OF ELIMINATION BY YEARS OF 551 HIGH-SCHOOL PUPILS

	First year	Second year	Third year	Fourth year
Boys	55	26	14	5
Girls	49	33	12	6
Combined	52	29.5	13	5.5

The above table shows that the heaviest loss occurs in the first and second years of the high-school course. Studies elsewhere have revealed much the same condition of affairs. The suggestion of such figures is obvious. If there is lack of adaptation either on the part of the pupil or the school, it is most acute in the earlier years of the course; eighty-one per cent. of the boys and eighty-two per cent. of the girls who left, did so during these years. For some cause or other these years presented peculiar difficulties to the pupils in getting settled down to the work. The question naturally arises as to whether the mental and physical changes characteristic of the teens might not have been a large factor in preventing these pupils from finding themselves in the work offered by the high school. The chapters which follow will possibly answer to some extent this question. ✓

In the case of the one thousand pupils studied in New York City, it can not be urged that the **Dulness of pupils a minor factor** heavy loss there noted was due to the fact that large numbers of those who entered were mentally dull. On the contrary there is excellent evidence to indicate that the pupils who enter high school are in a large degree those elementary-school pupils who have been more than usually successful in their earlier work. If the high schools get the better pupils from lower grades and then fail to hold them, there is ground

for suspicion that the work offered does not make a vital appeal to those who enter.

Since this is the time when educational forces may exert their greatest influence in the making of the individual, and since also it is the final opportunity of the schools, we have a right to demand the finest possible adjustment of the schools to the needs of the youth.

It is encouraging indeed to note the rapid development in the last two decades of all kinds of schools, public and private, technical and cultural, for the adolescent; it is also encouraging to note the largely increasing attendance at such schools. But with all current progress there are evidences, as we have indicated above, of much lack of nice adjustment to the ends in view.

"Between 1900 and 1910 the number of pupils in public high schools in the United States increased over seventy-six per cent.; the teachers have increased in this same period over one hundred per cent. The number and value of high-school properties has increased proportionately during this period, including improvement in the quality and quantity of facilities for work in libraries, laboratories, gymnasia"; but for twenty years there has been no increase in the percentage of pupils who are graduated. Take the country over, probably much less than half of those who enter graduate.

In the larger cities the number of graduates falls as low as ten or eleven per cent. of those who enter. The fact that so many youths enter the public high schools indicates that "some one in control regards it worth while for these pupils to engage upon the work of the secondary schools, though they may at the outset expect to do but one or a few years of the work. But the fact that approximately eighty-eight per cent.* do not complete the course indicates that most of those who thought it worth while to enter the high schools, for some or many reasons do not find it possible or perhaps worth while to follow out the course, even if at the outset they intend doing so." (4)

Be it far from us in this place to criticize harshly our public high schools. We wish rather to show **The conditions of greater efficiency** as clearly as may be shown the directions in which there is yet room for improvement. With all current progress, then, the degree of efficiency attained is not so high as it should be. There is much loss, much wasted energy, on the part of both the teachers and pupils. How can a higher degree of efficiency be attained? Only by a minute study of the nature and operation of every factor involved. Thus the character and amount of outside social forces playing upon the school should be carefully determined and, upon

*That is, approximately twelve per cent. of the enrolment of any one-year graduate. If there were no elimination the percentage of graduation each year should be about twenty-five per cent. of that year's enrolment.

the basis of such determination, definite remedies should be suggested and wisely applied. Likewise the teaching and administrative processes of the high school should be more carefully adjusted with reference to eliminating waste and increasing the quantity and quality of the product. And underneath all, as the common factor in every one of these problems, is the pupil himself. Every other factor in the process must be finally adjusted with reference to the needs of the pupil, to the sort of physical and psychical being that he is. How do his present characteristics and the period of development through which he is passing need to be taken into account in educating him? It seems almost puerile to raise such questions. The common-sense answer would certainly be that every effort should be made to adjust the machinery of the schools with all nicety to the pupil's physical and mental characteristics; not of course for the sake of humoring him, or making things easy for him, but because *nothing* can be done wisely except *on a basis of exact knowledge* of that with which we have to deal.

In the pages which follow we shall turn for a time from the school problem and center our attention upon the youth himself. We shall try to describe as far as possible the changes, physical and mental, which occur at this time. In still later sections we shall consider possible adaptations of the school to the needs of boys and girls in their teens.

Authors referred to in the text:

- (1) Falkner, R. P., *The Fundamental Expression of Retardation, The Psychological Clinic*, IV: 213, 1911.
- (2) Cf. Strayer, G. D., *Age and Grade Census of Schools and Colleges, U. S. Bureau of Education Bulletin*, 1911, No. 5.
- (3) Van Denburg, J. K., *Elimination of Pupils From Public Secondary Schools, New York*, 1911.
- (4) Caldwell, O. W., *Laboratory Method and High-School Efficiency, Popular Science Monthly*, March, 1913.

References for further reading and study:

- Book, W. F., *Why Pupils Drop Out of High School, Pedagogical Seminary*, 11:204.
- Gay, G. E., *Why Pupils Leave High School, Education*, 22:300.

CHAPTER II

THE PHYSICAL CHANGES OF THE HIGH-SCHOOL YEARS

OUR study of the high-school pupil may properly begin with a brief account of certain of the physiological changes of the period of youth, especially the changes which cluster about the development of physical maturity. Those changes are, in many respects, the most important of any that occur in the individual's progress from birth to manhood and womanhood. At any rate they stand out more strikingly, develop with greater rapidity and bear a more definite relation to the mental life than do any previous phases of bodily growth. The intellectual, emotional and moral development of the youth can be fully understood only as one recognizes that profound physical changes are then rapidly taking place, changes which carry with them, to a certain extent, a series of readjustments in the bodily, as well as in the mental, organism.

These physiological changes are the more important for our study because they occur at the time when an increasingly large number of boys and

girls are finishing their grammar-school course, and are entering higher schools or else dropping out of school altogether. It would not be strange, indeed, if the character of the work, even to the extent of its success or failure, should be very definitely associated with these physiological transformations and readjustments.

Let us first of all see what the changes are as over against the phases of childhood development.

The growth acceleration of the early teens

Even the most ordinary observer of children has noted how most boys and girls suddenly begin to grow rapidly somewhere between the ages of twelve and fifteen. A youngster in the years preceding these has grown so gradually as to excite little attention from those who are with him daily. He grows to be sure, yet imperceptibly. But, almost all at once, it seems to his parents, he begins to shoot up. In spite of a watchful mother his sleeves get too short and an awkward length of shank appears between his shoe-tops and the bottoms of his knee trousers. His movements become ungainly. He stumbles about and has great difficulty in knowing what to do with his hands and feet. This awkwardness is less apparent in girls than in boys, and the girl's figure also rounds out more quickly than does the boy's. All teachers of mixed classes from twelve to fourteen have especially good opportunity to see how the girls for a time forge ahead of the boys of the same age in

height and weight. The girls are clearly beginning to look like young ladies, while the boys with whom they have thus far played on scarcely equal terms now seem hopelessly stranded in childhood. (See the accompanying illustration.) This year or more of manifest physical superiority of the girl, with its attendant development of womanly attitudes and interests, accounts in part for the tendency of many boys in the early teens to be averse to the society of girls. They accuse them of being soft and foolish, and they suspect the girls' whisperings and titterings of being laden with unfavorable comments regarding themselves. It is the beginning of the break-up of the familiar easy comradeship of childhood and marks a transition to a new and more profound interest in one another which is soon to appear.

The maturing of the sex function is, of course, central in all these physical changes, and the rapid increase in stature is so nearly coincident with the change of puberty that it may ordinarily be taken as a proof that that change has taken place. In all the years from birth through childhood the child's rate of growth declines, at first very rapidly and then more gradually. The increase in height of the normal child in its first year of life may be as much as fifty or seventy-five per cent. over what it was at birth. But the rate declines sharply year by year until the ninth for girls and the eleventh for boys. At this time of the lowest ebb in growth

the annual increase may be less than three per cent. Then there is a somewhat abrupt upward turn in the curve, especially of boys, which in two or three years reaches a maximum of four or five and even six per cent. of gain over the year previous.

When the records made by many children—say several hundred or thousand—are massed and averaged, a curve may be drawn which seems to indicate that the period of accelerated growth is spread over several years. It is found, however,

Individual records contrasted with mass records

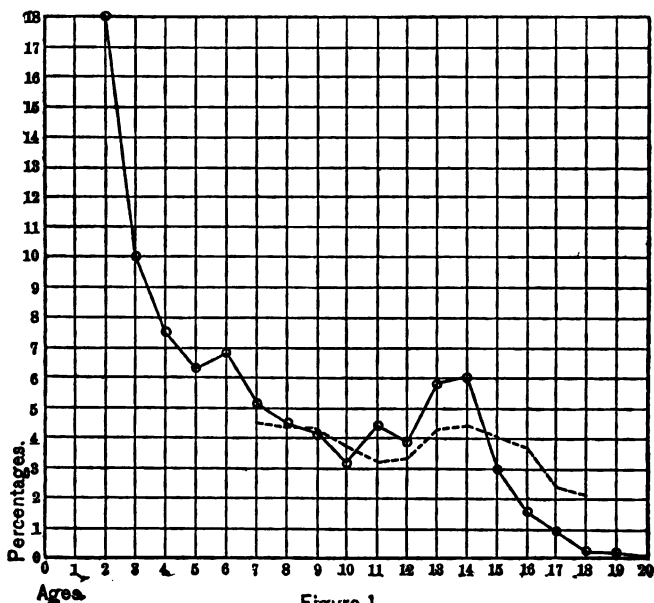


Figure 1.

Comparison of the growth curves of one boy (solid line) and a group of Chicago boys (after Smedley) (dashed line)



Girls in their Early Teens are Often Taller than Boys the Same Age or even Older. The Boy is Thirteen, the Girl Twelve



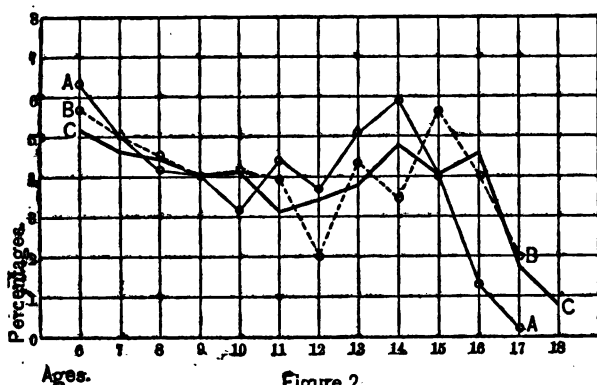


Figure 2.

Annual increase in height of two boys (curves A and B), compared with the mass curve, C, the annual increase in height of Boston boys (after Hartwell).

when individual records are examined, that the period of most rapid growth in the case of a given child is much shorter, often not more than a single year, though of course both before and after this most rapid period the child may be growing somewhat faster than he did before the pubertal acceleration began. The difference between the mass curve and the individual curve is worthy of study, and two sets of such curves are here reproduced (Figures 1 and 2). The important fact brought to light by comparing such curves is the somewhat wide difference among individuals in the time of their coming to the pubertal change. Thus, some boys may mature as early as thirteen, others at fourteen and some as late as sixteen. While then, the curve of each individual is abrupt and short, if the curves

of many are put together, they result in a long, gradually rising and gradually declining line. It is, moreover, not merely the brevity for the individual of the period of rapid growth, but the suddenness of its rise and decline that is emphasized by these records. All in all, they vividly suggest that the child is being put to a severe test to accomplish his transition to physical maturity. This is a period, therefore, which demands a good reserve fund of general vitality that it may be successfully and easily passed over.

It should be noted also that it is not merely in these pubertal years that girls are slightly in advance of boys in their development. As early as the third or fourth year of life, if not earlier, girls are from a year to a year and a half ahead of boys of the same age in every phase of growth. This has been noted, for instance, in the hardening of the bones of the skull and in the appearance of the second and permanent set of teeth. It is doubtless true of other phases less easily measured.

The acceleration in stature referred to above is only one of many accelerations of this period. Puberty is, in fact, accompanied by rapid increases in almost every other aspect of bodily development. The heart maintains about the same ratio to the rest of the body that has existed in childhood. The arterial system grows "less relatively than the heart," so

that at adolescence the blood pressure is greatly increased. The muscles develop faster than any other part of the body, resulting in a marked increase in weight. Figure 3 B presents this accelera-

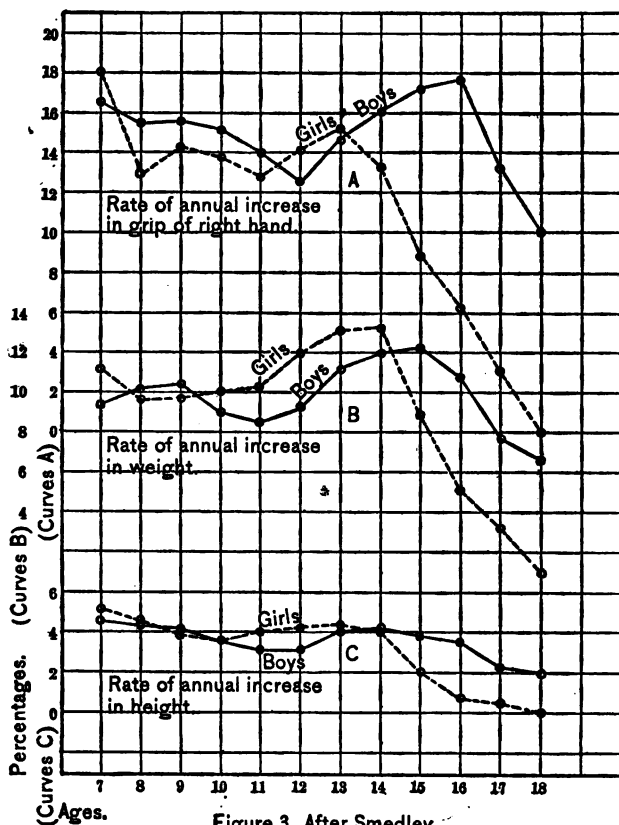


Figure 3. After Smedley.

tion in weight graphically. While rapid increase in weight begins at the time of the more rapid growth

in stature, it is not at first so manifest. The curve, however, rises higher and stays up longer. Puberty with girls is generally accompanied by an increased girth of chest and hips, and before the teens have passed both boys and girls, if in ordinary health, attain a well rounded muscular development that

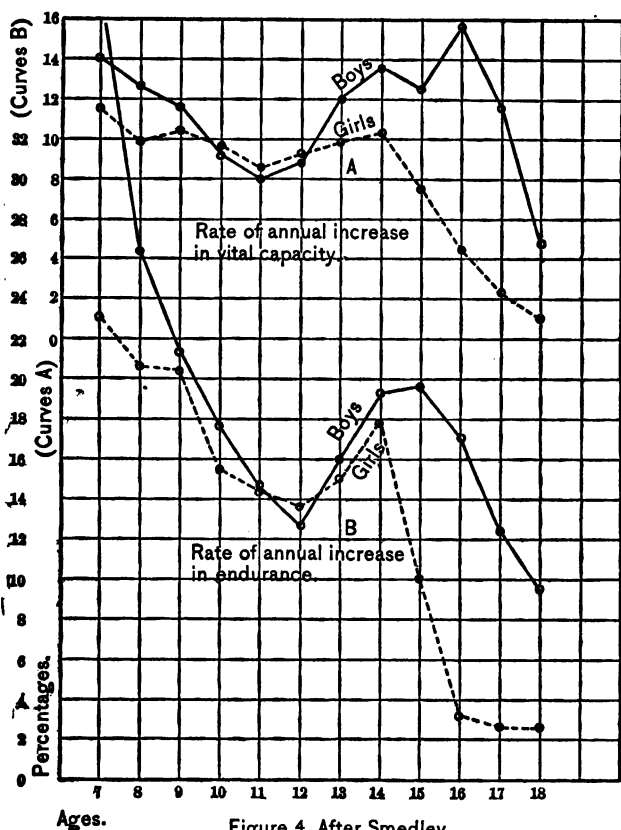


Figure 4. After Smedley.

gives them very nearly their normal weight as adults.

At this same time, also, occurs an increase of lung capacity, more striking in the case of boys than of girls (Figure 4), but clearly evident in both sexes. Muscular strength as measured by the grip of the hand, the lifting power of the arms or of the back also increases rapidly at the same time (Figure 3 A). Some investigators contend that the organs of sense also "undergo characteristic alterations," but of this much less is known with certainty. (1)

The gross and easily measured changes referred to above point to an intensification of all growth processes at this period of transition to physical maturity. It is, in a sense, the flood tide of development. Vital forces acquire a momentum that they have not possessed before, and which to some extent subsides later, never to be regained. The life intensity can be measured at different ages by the ratio of those living to those dying at each age. If the ratio of the living to those who die is high at a given age it indicates a great or a high vitality for that age. Doctor Hartwell's study of the physical development of Boston school children shows the lowest death rate for girls at the age of twelve and for boys at thirteen. At earlier ages, for example at eight, one child in one hundred sixty died. At seventeen the ratio was about the same, but at the

**General intensi-
fication of all
vital forces**

period just preceding the accelerated bodily development of puberty the ratio of the living was three hundred to one (Figure 5). (2)

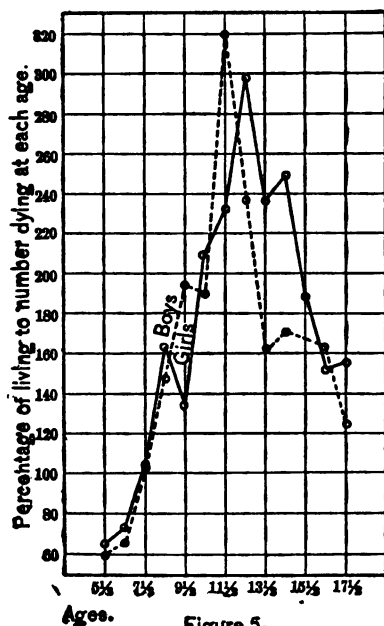


Figure 5.
Specific life intensities of each age, from
Hartwell's study of Boston school children.

All this intensification of bodily growth processes and of the power to resist death is but the outward expression of the deeper lying **Sex maturity the fundamental factor** change to physiological or sexual maturity. This latter is the cause underlying all

other changes. If for any reason it is deferred these other increases are also deferred. When sexual maturity comes, they come with it.

As was suggested on a preceding page, there is some difference among children as to the age of coming to physiological maturity.

The time, variable

As every one knows, girls, on the whole, mature from a year and a half to two years earlier than boys. Climate and race are influences which hasten or retard the process for both sexes. In the warmer climates maturity comes earlier, especially with the dark-skinned races. Among the races of the temperate zone the Scandinavians develop somewhat later than others; the Hebrews somewhat earlier.

Economic and social status likewise exerts a definite influence upon the time of puberty. Poor food, lack of fresh air, insufficient clothing, hard work and bad hygienic conditions, all probably retard development, while the opposite conditions associated with a more comfortable, healthful life hasten the change. The average age for this climate is regarded as most properly twelve to thirteen for girls and thirteen and a half to fourteen and a half for boys. But in every large group of children there will be found many who vary above and below these averages from one to two years.

The accompanying table shows the estimated de-

gree of maturity of the boys and girls in the grammar school of a small city in Iowa:

TABLE II

137 BOYS				135 GIRLS			
Ages	1	2	3	Ages	1	2	3
10½	6			10½	4	1	
11	4			11	3	2	
11½	12	1		11½	5	3	
12	8	2		12	8	3	
12½	13	3		12½	5	12	2
13	7	9		13	4	12	4
13½	9	19	1	13½	2	11	8
14	3	12	1	14		8	11
14½	2	6	7	14½		5	9
15		2	3	15		4	3
15½	1	1		15½		1	1
16		1	2	16			4
16½-17			2	16½-17			
Totals,	65	56	16	Totals,	31	62	42

The columns numbered 1, 2 and 3 refer to the immature, the maturing and the matured groups respectively.

The ages range from 10½ to 17. It will be readily seen by inspecting the table that the most common age of estimated pubescence in this group of boys is 13½ to 14 and in the case of the girls from 12½ to 13, but for both sexes there are cases of

maturing on each side of this middle point, i. e., earlier and later, of one to two years. The condition shown by this table may be taken as typical of American children in this latitude. It is fairly well established that children tend to vary more in the changes of pubescence than in any other growth period, and that the variation is about as illustrated in this table.

In any given community there are, of course, many different causes which operate differently on different children to produce this variation. Race is one factor, and immediate ancestry, or family heredity, is another. But more important than these is probably the group of environmental influences which have played upon the child through the years of infancy and later childhood. Ill health and unfavorable hygienic conditions are regarded by most students as tending to retard pubescence. Boas, one of our greatest authorities on the growth of children, says: "It has been shown particularly that better economic conditions bring about a more rapid and also a greater development of the body than occurs under less favorable conditions. Among the poor, the period of diminishing growth which precedes adolescence is lengthened and the acceleration of adolescence sets in later. The whole period of growth is lengthened; but the total amount of growth during this longer period is less than the amount of growth attained during the shorter

period of growth of the well-to-do. Therefore, we find throughout that a young child which grows slowly will continue to grow slowly until the period of adolescence sets in. Afterward, the child that has grown slowly during the early years of childhood will grow rapidly." (3) After referring to climate and nutrition as possible causes of deferred pubescence, Boas continues, "It seems plausible that in the bulk of our population the better development of man in modern times is due less to better nutrition than to the fact that hygienic conditions of childhood have improved. . . . It seems plausible that, with the diminution of the number of diseases that attack the individual, and the consequent elimination of their retarding influences, growth suffers less interruption, and that the final bulk of the body is increased. The differences between social classes are great. . . . The whole group of the poor are, at any given time, physiologically younger than the well-to-do." (3)

These facts and suppositions suggest the view, held by many, that a moderately early development of puberty is much more to be desired for the child than a deferred or late development. It is likely, also, that an extremely early development is abnormal and unfortunate, but there are no definite studies on this point. However that may be, if the child comes to maturity at the usual or normal time it is thought that he will make the change better than if he ma-

tures after the usual time. For one thing, the general acceleration in his growth will be spread over a longer period. He will not be apt to grow so rapidly at any one time, but he will continue at it longer and will probably reach a more satisfactory physical development than if his pubescence were late. The earlier and more prolonged ripening of the body does not, therefore, put such a heavy strain on the child's vital forces as does a later ripening. The strain, if there is one, is spread out and more easily met. Physicians tell us that girls especially, who pass the period with difficulty are those who have not accumulated sufficient reserve force in the years of childhood or who, at the time of puberty, dissipate their strength in unhygienic living. Although it is a critical time, it is not nature's plan that it should be accompanied by unusual weakness or by serious breaks in health.

It is, as we have pointed out, a time when the vital forces are intense. But the overflowing energy is all needed for the accomplishment of these final physical changes, for the maturing of the sex functions, and for the rapid growth of bones and muscles. If, however, it is diverted from these natural channels, as it may be so easily, by an excess of physical work or, as is more likely to-day, by excessive social interests, parties, clubs, etc., with their attendant interference with regular habits of rest and sleep, the child is almost sure to suffer for it.

Both parents and teachers are liable to be misled by the exuberance of the child's enthusiasms. He **But it may frequently gives the impression of easily develop** being able to stand anything. He *can* endure a great deal, but since the demands of his body upon his energy have never been greater than now, an excess of energy devoted to other things than growth will naturally hamper the physical development and a serious break in health will often follow. In fact, so many observers of school children in this period have noted an increased tendency to ill health, especially in girls, that it is popularly regarded as a weak age. Thus, Doctor Cornell, a school physician of Philadelphia, says, "Many animals pass through a period of lessened resistance fraught with danger of disease and injury. The soft-shelled crab and the moulting bird are examples. At these times shelter rather than exposure should be sought, but the civilized human introduces his adolescent young into the high schools, and the factory, endeavoring to break down the already weakened vital resistance, and to overstimulate the nervous system at the period of its greatest irritability." (4)

Just how far the years from twelve to fourteen are actually years of "weakened vital resistance."

Overstimulation easy as Doctor Cornell expresses it, needs to be much more carefully investigated. That they are years when both boys and girls need special care and protection is probably

true, as we have already stated above. They are also doubtless years especially susceptible to overstimulation, and nervous irritation. There are, however, eminent authorities who believe that all would go well if the vital forces were only conserved for growth and not dissipated in an excess of social and economic activities or by unhygienic modes of life. Doctor Leo Burgerstein, of Vienna, who has made careful observations upon the health of both sexes in early adolescence, says, "It is a well-known fact that the time of that change is not only accompanied by physical troubles but also by a psychical depression and retarded interest and fitness for mental work, and these facts must strike us all the more because well developed, healthy girls, under favorable circumstances pass through that process of development which is a *physiological* one, without difficulty, whereas the above named troubles will arise under unfavorable conditions with girls who are not completely healthy," whose ill health can, as Doctor Burgerstein goes on to point out, often be traced to "injurious influences of school life, such as continual sitting in bad conditions as to air and light, together with difficult and trying home work." (5)

We stated on a preceding page that an early and more prolonged period of maturing is regarded as better than one deferred until the middle teens or even later. It was there noted that late maturing boys and girls undergo a sharper period of rapid

growth but that they seldom make up completely what they have lost, the time being too short for them to catch up completely with the more favored children who matured earlier and at a more leisurely rate.

Every teacher can think of instances of boys and girls who remained "little" long past the time when their schoolmates of the same age had "made their growth." Finally the spurt upward with these children would come, but it seldom would last long enough to bring them up with the rest. These cases need different care from those who are in the same transitional stage but younger. The latter should be passing through the stage slowly and easily while the belated child will probably be developing rapidly and suffering a much heavier drain upon his all too limited physical capital.

So much for the phases of physical growth. These form for us, in this study, the background of the important psychic changes and readjustments of adolescence. Just as the physical growth, so easily observed, is but the outer manifestation of the child's attainment of physiological or sex maturity, so the psychic changes center about the definite development of the sex instinct, which is, in one form or another, the common element and the central driving power in the development of the psychic life. We should not, of course, make the mis-

**Relation of the
physical changes
to psychical
development**

take of assuming that children of earlier years have no interest in problems relating to sex. It has been shown by careful studies that even very little children have such interests, that they are, in fact, far more sensitive to such matters than most parents and teachers suppose. But these early phases do not concern us here. Their proper recognition and wise treatment are important phases of child welfare that require an altogether separate discussion from that in which we are here engaged. It is not until the approach of puberty that these early interests begin to take shape in the definite reproductive instinct with all its associated instincts and interests.

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- (1) Hall and Tanner, Article on *Adolescence*, in *A Cyclopedia of Education*, New York, 1911.
- (2) Hartwell's study is referred to in Burk's *The Growth of Children in Height and Weight*, *American Journal of Psychology*, IX:255.
- (3) Boas, F., *Growth*, article in *A Cyclopedia of Education*.
- (4) Cornell, W., *Health and Medical Inspection of School Children*, Philadelphia, 1912.
- (5) Burgerstein, Leo, *Coeducation and Hygiene. Pedagogical Seminary*, XVIII:1, 1910.

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- Boas, F., *Growth of Children*, *Science*, Dec. 13, 1912, p. 815.
- Hall, G. S., *Adolescence*, I, Chap. 1, *Growth in Height and Weight*.

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CHAPTER III

PHYSICAL DEVELOPMENT AND SCHOOL EFFICIENCY

IN our study of the high-school age we have thus far confined our attention to certain of the important phases of growth in early adolescence. It was noted that the development of physiological maturity at the time of puberty is the central fact about which all other changes are grouped and in terms of which they must be explained. The reader should not forget the two main points emphasized in the preceding chapter: namely, that the period of puberty is a time of general quickening and intensification of all phases of bodily development, illustrated in the rapid increase in height, weight, lung capacity, muscular strength and resistance to fatal diseases; and, in the second place, that there is a difference between an early, or normal, maturity of the body and a late development, the former being associated with better economic conditions and superior health, especially in later childhood. It was pointed out that children who mature at the usual time make

the transition more slowly and more easily than do those whose maturity is deferred, say, until past the middle of the teens.

Those two points have important bearings on the mental development of the young adolescent and

Relation of physiological maturity to mental development

are vitally related to his success or failure in his school work. A few careful studies have been made of school progress during these years, and they all suggest that there is a definite connection between the transition period of puberty and the development of physical maturity, on the one hand, and school efficiency, as measured both by the quality of work and the rate of progress through the grades.

Puberty is, therefore, a critical period in the life of every boy and girl. Yet how many teachers have more than hazy ideas of its importance? Only here and there do we find a discerning man or woman who gives it any consideration in the handling of pupils in the upper grammar and lower high-school grades.

If the school work of most boys and girls continued smoothly and without interruption in these

A period of heavy elimination from school

years of physiological transformation, the teacher might well ignore the change, but such is not the case. We have already pointed out that it is the weak point in our school system. While a goodly and increasing number of children enter

the high schools every year, far too many of them stay for only brief periods.

The loss varies in different parts of the country and in differently sized cities and schools, but in all cases it is sufficiently large to command the serious attention of the supporters of the public schools. It has been estimated that one-third of all boys who enter the high schools of New York City drop out at some time during their first half-year, and probably not one in nine of all the boys and girls who enter those high schools graduate on time. As we have already stated, the loss in the smaller high schools, at least in the Middle West, is not so great as in the large cities East and West but it is large enough even in these smaller schools to make us all stop and think.

The conditions which determine how long a boy will stay in school are many. Some of them he appreciates and others he does not. It is quite possible that his course may be more largely shaped by influences of which he is only dimly conscious than by those which he apprehends clearly. Hence, the reasons he himself may give for leaving school, may be only transient and superficial reasons, excuses as it were, for a course of action he has determined upon but the "why" of which he can not clearly state.

Among the causes determining his success or failure in school and his consequent desire to stay

Growth conditions in or drop out, the mental and physical changes of these years must surely play some part. They will, however, have to be included among those influences of which the boy himself is quite unaware.

School failure on the part of so many young adolescents certainly suggests a lack of adjustment somewhere. The school itself

Social conditions may be at fault in maintaining improper standards of success, or in offering to the boys and girls studies ill-suited to their real needs. The elementary schools also may be at fault in not training the children sufficiently in habits of application and in keen enough interests in matters intellectual. The home and society generally may also be responsible for permitting the youngster to lead the sort of life he does, so that he may come up to the high school with lack of "nerve" or lack of that grit which makes him willing to work hard. He may see the world in a wrong perspective and consequently misapprehend what that world is going to require of him when he grows up. He may lack wholesome ideals and a sufficiently clear conception of his own personal responsibility for a successful life.

Doubtless all the above influences contribute something toward shaping the attitude of the boy

Increased efficiency from better adjustment who might continue in school but who actually does drop out. Let us recognize that there may be

the very best of stuff in the youngster and that dropping out may be the most suitable thing for him to do under the circumstances. This much may be true, as things stand at present, but we should insist that a better adjustment of forces somewhere, or everywhere, along the line might result in his remaining longer in school and in his being better trained for an efficient manhood. One thing is certain, American schools have been instituted to train American youths. In proportion as these youths do not go to the schools provided, they are not getting the training they are supposed to need. Among the various readjustments and finer adaptations required by such a situation, there is certainly need for a finer adaptation to the physical and mental characteristics which the boys and girls inevitably bring with them into the higher schools. If some of them are inclined to drop out of school after a few months' trial of its work, it will do little good to try to comfort ourselves with the thought that their decision is unwise or short-sighted; that they have not remained long enough really to appreciate what an advantage it may be to them to spend a few more years in systematic study. The hard cold fact remains that many of these children do not remain when they might just as well do so, and it is our business, therefore, to see what we can do in readjusting our machinery so as to *keep* them in training a little longer.

The first and possibly the simplest question suggested by the facts of the preceding chapter, a **Physiological age** question which should be capable **and elimination** of a rather definite answer, is that of whether this tendency to drop out of school in the upper grammar and lower high-school grades is in any way related to physiological age or degree of physiological maturity. Thus far we do not know, in the case of large groups of boys in the early teens, whether the leaving of school is any more frequent with the mature than with the immature; whether the transition stage of puberty itself tends to make the youngster dissatisfied with the school routine and its studies, and unduly anxious to try himself out in the world.

It would be comparatively easy for a superintendent of a fair-sized city school system to find out, in the course of a few years, if there is any such relationship, and whatever might be thus determined would be not only of much scientific interest but of great practical importance in the administration of the schools.

It has, indeed, been shown by a few investigators that those children who are retarded or late in their attainment of physical maturity **The advantage of maturity** are ordinarily also retarded mentally and that advancement in the school grades is related to progress on the physical side. The mature pupil with his greater height, weight and muscular strength is superior mentally as well as

physically to his immature classmates. There are, of course, exceptions to this general tendency. The observing teacher will readily recall large boys, who have been in his classes, whose work has been inferior to younger, less fully developed boys. Some of these cases are real exceptions to the tendency suggested above, others are probably only apparent exceptions.

It is well to remember, as we said before, that there are many separate influences playing upon a child of any age which react on his school efficiency. His degree of physical development, though important, is only one of many factors that determine how he will behave or what he will accomplish. Some of the disturbing circumstances which interfere with the normal progress of the young adolescent in his school work we shall consider presently. For the moment we may confine ourselves to the influence of growth itself, as far as inquiries into the subject throw any light on the problem.

While there are no extended studies as to this connection of maturity with school attendance, **What investigations reveal** there are many indications that such a relationship does exist and that it has an important influence on school success. For instance, in most schools, large or rapidly growing boys and girls are usually found in the same classes with those who are quite immature, that is, with boys and girls who are yet "little children."

Thus, in a grammar school known to the writer, a seventh grade class contains eighteen little boys, fifteen pubescent and four who are mature. The physically mature children, especially the boys, are very apt to feel awkward and out of place under these conditions. They do not have much in common with those who are less well developed than themselves, even though they may be of the same age in years.

With the above fact in mind, an experiment was recently made in a New York City boys' high school. The object was to see whether boys of the same degree of development did any better work when grouped together than when mixed with younger and older boys. The entering class was divided into sections according to the degree of maturity of its members. Two hundred ninety-five boys were thus divided into several sections according to their degree of physiological development. At the end of six months it was found that about twenty per cent. of all these boys had left school and twenty per cent. more had failed in one or more of their studies while sixty per cent. were ready for promotion. These discharges, failures and promotions were scattered unevenly and in no apparent order through all ages from fourteen to seventeen, and through all the various degrees of maturity. These percentages of failure seem high when taken by themselves, but fortunately we are

able to compare them with the record of another group of one hundred forty-nine boys of the same degrees of maturity, who entered the same high school at the same time, a group who were probably not in any respect different in ability from the first group of two hundred ninety-five. The members of this second group were divided into sections, not according to physiological age, but according to the elementary schools from which the different boys came. Of this group, thirty-one per cent. dropped out before the end of six months, seventeen per cent. failed and fifty-two per cent. were promoted. The record of a previous class of three hundred eighteen boys, in which there was also no attempt to classify according to maturity, was also examined, and in this class it was found that there had been a loss, in six months, of twenty-seven per cent., failures seventeen per cent. and promotions fifty-six per cent. As Doctor Foster, who made the study, says, "The group of boys classified according to physiological age had a higher percentage of promotions and a very much lower percentage of discharges. The failures in the two groups were about the same," at least they were so nearly alike that no conclusions, one way or the other, could be drawn from them. "The marked difference seems to be in the matter of discharges. May this difference not be due to the grouping of the boys of the same development making the work

so much more enjoyable that they did not have the same inclination to leave school?"(1) Here is surely a point that every serious teacher must consider. Putting together children of the same physiological age is apparently a factor in keeping them in school.

In the investigation just described it will be noted, however, that the mature boys did not seem

Need of separating children of different degrees of maturity

to do their school work any better than the less developed ones.

Possible causes of this we shall consider later. There is evidence,

nevertheless, that maturity does have a favorable effect on scholarship. In certain schools it has been found, for instance, that a considerably higher percentage of boys who have passed the pubescent stage at thirteen, at fourteen and at fifteen years are promoted in their work than of those boys of these ages who have not yet matured. Of first year high-school boys observed by Doctor Crampton in New York City, eighteen per cent. of the mature and twenty-seven per cent. of the immature failed to pass at thirteen; at fourteen the difference was twenty-four per cent. and thirty-four per cent. in favor of the mature, and so on for the succeeding years. This school physician, therefore, makes the general statement that, the more advanced high-school boys are in pubescence, other things being equal, the better their scholarship.(2)

Commenting on such facts as have been men-

tioned above, Doctor Crampton says: "The great failure of education to-day is its inability to recognize the fact (where it is absolutely essential that it should) that children differ in rapidity of development. Its maladjustments are particularly evident at or about the time of puberty. The change from an asexual to a sexual life may occur at any age from six to twenty years, usually between twelve and fifteen, but when it does occur the changes are profound. In the short space of six months the child becomes a man or a woman, and the transition is fraught with the dangers and turmoil of a new birth. There is an outburst of physical growth, four or five inches are added to height, thirty or forty pounds to weight, and strength may be doubled in a short space of time. New mental abilities appear, while others disappear, the type of play changes, new companions are sought, new likings, tendencies, enthusiasms and emotions make up the whole life. Old landmarks of life fade and new ones are eagerly sought.

"The sexual ripening determines an entirely new outlook upon life, the earning instinct looms large in the boy, and the home-making instinct in the girl.

"The important fact that is constantly disregarded is the fact that the pubertal change leaves the child a wholly different being, different mentally, physi-

cally, and morally from the children in the stage just left behind. . . .

"Sitting alongside of each other, receiving the same teaching, subject to the same regulations and discipline, are children three or more years past puberty, and others three or more years lacking before the change will occur. The result is a chaos. No one course of study can be fitted to their disparate needs, and no one form of discipline can be enforced with each group with equal success." (3)

Maturity, however, as we said above, is only one factor, even though an important one, in determining a boy's standing in school.

**Maturity brings
a new mental
outlook**

The bad showing in their studies often made by the larger, more mature boys, is probably not caused by the fact of their maturity but by other conditions, which are liable to develop in the boys' lives within and without the school. The change in the mental outlook which always comes with maturity may make them restive and dissatisfied with the school routine and school tasks. They become not *less able* mentally but *less willing* to devote themselves to their lessons. There are manifold distractions to which they have become more or less keenly sensitive, distractions of social life or of athletics, the distractions due to opportunities to go to work, and to the desire to do "bigger things." All these interests serve to turn their attention away from

their school work. Their dissatisfaction is apt to be intensified if they find themselves in classes with "little" boys even though the latter may be as old in years as they are themselves.

Then again, an over-age, mature boy, say of sixteen or seventeen, in a first year high-school class, may be naturally dull, or **Mature boys in the lower grades usually dull** he may be backward because of irregular school attendance in the lower grades. He is, therefore, probably poorly equipped to compete with the smaller boys in his class who may be naturally brighter than he and who have been more regular in attending school, and this also will tend to make him restless and may lead to his early dropping out.

On the other hand, the little boy in the grammar grades, while he is not possessed of the wider mental outlook on life of his larger **"Bright" little boys** classmates may be natively brighter. In any case he is not so susceptible to the distractions that interrupt the work of these larger boys and he will, for the time being, tend to be a better student than they. These reasons alone would be sufficient to account for the larger number of promotions that may frequently be noted among the smaller and less mature boys and girls in grammar school. The situation is, of course, different in high school.

Crampton and Foster, who report the above ob-

servations on the physiological age of boys in its

No exact observations on girls

relation to school progress, do not have any similar data for girls;

but it is fair to assume that such studies of girls,

when they are made, will show much the same tendencies, except that the contrast between the immature and the mature girl is possibly not so great as the contrast between the immature and the mature boy. Such an assumption would be based in part on the fact that girls of different degrees of maturity do not usually show such striking contrasts in physical growth as do boys and, furthermore, that girls, in their early teens, are usually subject to fewer disturbing outside influences than are boys. Their lives are lived more completely inside the home and the school. They usually submit more willingly to the routine of school tasks. The adventurous, roving spirit, which in boys seeks an outlet in athletic and gang activities, appears to be less intense in most girls. At any rate, the high schools generally lose a smaller percentage of girls than of boys. While entering classes are quite evenly divided between the sexes, there are always many more girls than boys who stay to the end of the course. Many girls, to be sure, must stop to go to work, but larger numbers of girls than boys see in the high-school course a preparation for a future vocation, such as teaching, nursing, domestic science and clerical positions. It is also well known that girls, on the whole, make

slightly better grades in their studies than do boys.

Thus, it was found from a study of the grades made in one medium-sized high school in the Mid-

dle West, of two hundred seven-
Girls often do teen boys and two hundred seven-
better school work
than boys

ty-four girls in twenty-three successive classes covering a period of eleven and a half years, that the boys made seven thousand two hundred seventy-three passing grades and the girls nine thousand two hundred one. These groups included only those who actually finished the work and were graduated. The girls, as a whole, thus stood slightly higher than the boys in passing grades. But the difference is more marked when those of each sex are selected who did not make a single failure. Of such who had perfectly good records it was found that there were only eighty-seven boys as against one hundred twenty-eight girls.

This slight superiority of the girls over the boys is doubtless connected, in part, with the girls' more

early maturity. Since most girls
Superiority due reach this period from a year and
to girls' more
advanced a half to two years earlier than
development boys, say between eleven and thir-

teen, it follows that first year high-school girls, as a rule, show a higher percentage of mature individuals than is to be found among first year high-school boys.* If it is true that there is a relation between maturity and mental ability it

* Cf. Table II, page 22.

would, therefore, be expected that high-school girls would, as a whole, be better able to grapple with their studies than would the boys. This fact of earlier maturity and more advanced mental outlook of girls has important bearings on the question of coeducation in these years. This matter, however, will be considered by itself in a later chapter.

Authors referred to in the text:

- (1) Foster, W. L., *Physiological Age as a Basis for the Classification of Pupils Entering High Schools*, *Psychological Clinic*, IV : 83.
- (2) Crampton, C. Ward, *Influence of Physiological Age upon Scholarship*, *Psychological Clinic*, I:115.
Anatomical or Psychological Age vs. Chronological Age, *Pedagogical Seminary*, XV :230.
- (3) *The Significance of Physiological Age in Education*, *Transactions of the Fifteenth International Congress on Hygiene and Demography*, 1912.

CHAPTER IV.

A CONCRETE CASE OF SCHOOL EFFICIENCY

THE present writer has made a study of the relation of physiological maturity to school efficiency in the case of two hundred seventy-two grammar-school boys and girls ranging in age from ten and a half to seventeen years. The results, although based upon the records of pupils below the high school are significant in this study of the high-school pupil because the question of the relation of maturity to school work is in part the same regardless of the school the child may be attending. Moreover, our problem at this point is in regard to pupils of a certain age rather than of a certain school grade. We must begin by trying to understand the age itself irrespective of grades. These children were first grouped according to half years of age and each half-year group was further divided according to degree of maturity or physiological age.

The table given on page twenty-two shows the distribution of these children. This table reveals at a glance the complexity of the problem which teachers of any considerable group of children of these ages have to

face. Children of the same age present different degrees of physiological development. Take those who are between twelve and a half and thirteen years of age. From the table (page twenty-two) we see that of the sixteen boys in this group, thirteen are still "little boys," that is, they have not yet arrived at the stage of maturing, while three are in that stage already. Five of the girls of this same group are yet immature; twelve are maturing, and two are mature. The girls are, as we should expect, further developed physically than are the boys.

The difference in appearance of children of the same age in years but of unequal maturity is vividly suggested by the photographs of **Differences in maturity of pupils of same age** six boys in this school.* These boys are standing in pairs according to age in years. The picture shows the extremes of development which may be found in any school among children of the same age. One of the boys of each pair is manifestly still immature, all three of them are clearly still "little boys." Of the other three boys, the two larger ones to the left may be fairly judged as maturing. They are in their period of rapid growth. The lack of poise, characteristic of this period, is especially evident in the awkward position of one of them. The facial expressions of both of these boys is different from that of the little chaps and is further

* See accompanying illustration.



Both 12 Years Old

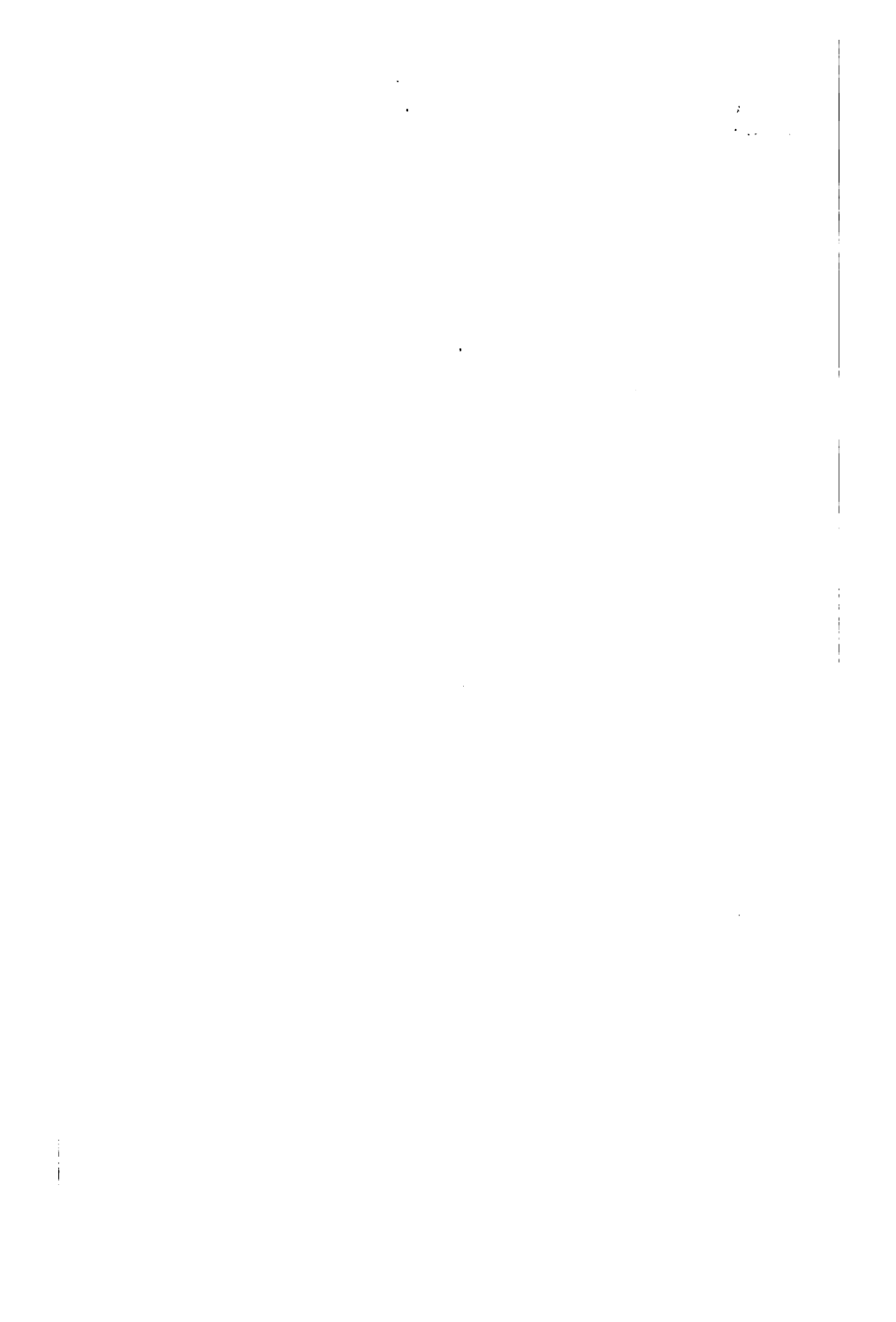


Both 13 Years Old



Both 14 Years Old

Boys of the Same Age are Often Unequal in Development



evidence of a different stage of development. The large fellow of the pair to the right is still further advanced in physical maturity. He has every appearance of a mature or a postpubescent boy. The little fellow by his side is, for some reason, late or retarded in his development. Although of the same age in years, his outlook on life and his interests are essentially different from those of his companion. The great difference in development often seen in girls of the same ages is brought out by the accompanying illustration.

It was noted in examining the above table (Table II) that there were thirteen little boys in the group between twelve and a half and thirteen. Even these boys were probably not all alike.

**Illustrated in the
twelve-and-a-half
to thirteen-year-
old group**

We may be practically sure, from what we know in general about the variation among individuals in reaching pubescence that some of the boys in this group of thirteen were just at the point of entering that stage, while some of them would probably not reach it for a year and still others might not reach it for two or even three years. Extended studies on the effect of early and late development of maturity would lead us to expect to find that the boys in this twelve-and-a-half to thirteen-year-old group who would not become pubescent till fifteen or sixteen were at the time of this study less well developed mentally than their schoolmates who were just ready for puberty.

By examining the grades made by these boys in this half-year we can determine roughly the extent to which they were alike or unlike in mental ability. Such a study of their grades shows that seven of them are classed by their teachers as good students while the remainder (six) are doing inferior work. What the actual future development of these boys may be, we can only know with certainty after it has occurred, but on the basis of studies made by other investigators it would not be surprising to find these boys of inferior scholarship relatively late in attaining their full physical development.

The point of importance emphasized in the preceding paragraphs is, then, this: Groups of children of the same age, especially between the years of twelve and sixteen, are far from homogeneous. Individual differences in physical and mental development which are more or less apparent at all ages, are now especially noticeable in these years and call for a correspondingly nice adjustment of conditions that these children may profit as fully as possible by their school work.

Certain other interesting points came out of the study of the grades and classes of these two hundred seventy-two pupils; points which throw some light on the relation between physiological age and mental ability. They are suggestions of relationships which, as far as they go, are significant,



Both 12 Years Old



Both 14 Years Old

Girls of the Same Age are Often Unlike in Maturity

but which of course need to be confirmed by further and more elaborate studies before they can be regarded as established facts.

These are some of the points referred to above. Taking all the clearly immature children together, and likewise all the maturing and the mature, it was found that the first, or immature group, made more good grades than did the second, or physiologically older group, and that the second group did better work as a whole than the third group of fully mature boys and girls, and also that the girls in every group made better showings than the boys. The figures are as follows:

TABLE III

PERCENTAGES OF GOOD GRADES MADE BY 272 CHILDREN BETWEEN
10½ AND 17 YEARS OF AGE

	Immature	Maturing	Matured
Boys	68.4	57.8	45.7
Girls	71.0	60.9	56.6

Doubtless the reader's first thought will be that these figures contradict earlier statements in this chapter, to the effect that advancement in maturity favors good scholarship. If, however, each of these three groups is divided into two sections, putting together in the first all who appear to be developing at the normal rate and in the second all who appear retarded or slow in their devel-

**School grades
of the different
physiological
age groups**

**Grades of the
younger and older
age groups**

opment we get somewhat different results. These are shown in Table IV.

TABLE IV

RELATION OF GOOD AND POOR GRADES IN THE YOUNGER AND OLDER AGE GROUPS

43 Immature boys of 13 yrs. or younger	75% good grades.
22 Immature boys of over 13½ yrs.....	56% good grades.
46 Maturing boys of 14½ yrs. or younger ...	75% good grades.
10 Maturing boys of over 14½ yrs.....	64% good grades.
9 Matured boys of 15 yrs. or younger.....	53% good grades
7 Matured boys of over 15 yrs.....	30% good grades.
<hr/>	
20 Immature girls of 12½ yrs. or younger ...	78% good grades.
11 Immature girls over 12½ yrs....	58% good grades.
33 Maturing girls of 13½ yrs. or younger....	68% good grades.
29 Maturing girls over 13½ yrs.....	52% good grades.
34 Matured girls of 15 yrs. or younger.....	60% good grades.
8 Matured girls over 15 yrs.....	40% good grades.

As far as the above data go, it appears that the children of early or normal development in every

**Normal develop-
ment better
than deferred**

case do better than those who are somewhat later, if not retarded, in their development. It seems, therefore, that the poor showing of the pubescent and postpubescent groups given in Table III is due to the grouping together of those who are early and normal with those who are late and perhaps retarded in physical development.

But even Table IV does not show the actual relation of physiological age to school standing as

**Evidence in the
marks of
these children**

accurately as it may be determined if we compare the standings of children of different de-

degrees of development who are of the same age in years. For instance, in the group of girls who are between twelve and a half and thirteen years, there are cases of all three physiological ages and those who are further developed make better grades than those who are less advanced in their development. This is the showing:

Immature girls of $12\frac{1}{2}$ -13 made 56% good grades.
 Maturing and mature girls of $12\frac{1}{2}$ -13 made 69% good grades.

Similarly for the next half-year:

Immature girls of 13- $13\frac{1}{2}$ years made 60% good grades.

Maturing and mature girls of 13- $13\frac{1}{2}$ years made 80% good grades.

Of the boys who are between 14 and $14\frac{1}{2}$:

The immature made 53% good grades.

The maturing and mature made 72% good grades.

While the number of cases is too small to furnish conclusive evidence, it points, in general, to this conclusion: The children of advanced development in these years are superior in scholarship to those who are less fully developed.

It was also found in this group of children that of forty-three maturing boys between the ages of thirteen and fourteen and a half
 Maturity also fa-
 vorable to progress over seventy-nine per cent. were
 in the grades in the upper three classes 7a-8a

as against twenty-one per cent. in the first three classes, 6b-7b.

Of fifty-one maturing girls between twelve and fourteen and a half over eighty-four per cent. were found in the three advanced classes as against sixteen per cent. in the three lower classes. This is shown graphically in the following figure (6).

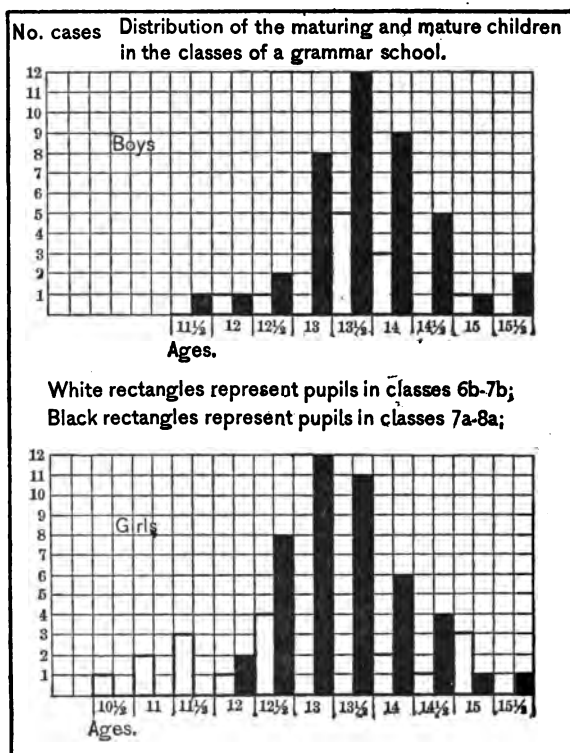


Figure 6.

It would not be safe to make sweeping generalizations from this study. It needs to be extended over a longer period and similar studies should be made in other schools. But, as far as it goes, the study seems to indicate a superiority of the maturing or mature child over the immature between the ages of twelve and fourteen and a half. Inferior work seems to be associated with late maturity. The results here presented are in accord with Doctor Crampton's generalization which was based on an accurate study of four thousand eight hundred high-school boys. He says, "Earlier pubescence favors good scholarship, later pubescence, poorer scholarship. This should be taken into consideration by all who have the care of the pubescent." (1)

As he further points out, if we take any group of boys in high school at the same age, say fourteen to fourteen and a half, we shall find that they are scattered through several grades. Some will be in the first term; others in the second and so on up to even the fifth or sixth. That is, boys in the first half of the fourteenth year will be found all the way from the beginning of the high-school course well into the third year's work. Now the significant thing is that those pupils of this age who are farther along in their grades are on the whole the ones who are also further developed physically. For example, it has been found that of the

fourteen-year-old boys who are in the first half-year of the high school, only fifty-seven per cent. are mature, while of the boys of the same age in years but in the fourth and fifth half-year's work, over eighty-three per cent. are mature. These observations clearly show that, age for age, the mature have the advantage over the immature in their rate of school advancement. In general, Crampton finds that fifty per cent. more of the immature boys in high school fail, than do of the mature.

Not many observers have taken into account the physiological age when they have attempted to **Smedley's findings** measure the ability of children **in Chicago** in their early teens. Smedley's studies on small groups of Chicago public-school children some years ago, while they neglected this important factor, showed nevertheless that the larger and stronger pupils were better in memory tests and further advanced as to class standing than the smaller and weaker pupils of the same age. It is probable that in the case of the pupils in the early teens that physiological age was the determining factor.

Interesting evidence as to the relation between physical and mental development comes also from the study of mentally defective children.

Doctor Henry Goddard, who has made extensive measurements of the height of defectives, found that for every age such were below the average of the mentally sound and that the difference was

greatest from twelve years on. While we must not, of course, conclude that the mental inability of

**Goddard's study
of physical de-
velopment of the
feeble-minded**

such children is caused by retarded or imperfect physical growth, those observations help to establish the relationship which

we have suggested as existing between all sides of mental and physical development. At the age when the normal child is forging ahead most rapidly, when he is experiencing an intensification of all processes of life, the defective child is dropping behind all the more rapidly. His mental inferiority is the more strikingly indicated by the failure of his body to maintain the rate of advance which it has seemed to establish in childhood. Thus, without here entering into the causes of low mentality, we can at least point to the striking and widening difference between the normal and the defective in these adolescent years in the matter of physical growth, as one of the evidences that mental and physical well-being go hand in hand. The defective child is not only unable to accomplish the usual physiological acceleration in these years, he rather reveals his inferiority by still further falling behind the youth of normal endowment.

Referring again to the apparent exceptions to the principle above stated, namely that physiolog-

**The mature boy in
grammar school
out of place**

ical maturity favors good school work, the reader should bear in mind the following possibilities

and limitations: Mature boys in the grammar grades are nearly always over-age and hence dull or slow fellows. If they had been of normal mental ability they would ordinarily, if in school at all, have been in the high school rather than in these lower grades.

It is in the high school that we find the clearest relation between maturity and mental ability. Here

High-school methods should be adapted to degree of maturity

the "big boy" is where he should be and does better than the "little boy," as Doctor Crampton has pointed out. The cases of poorer

work in this type of boys in high school must usually be interpreted as due to lack of interest in the school tasks and to too much attention to outside activities. It is, in fact, quite likely that the methods of too many of our schools are better adapted to the minds and interests of little children than they are to the needs of pubescent and mature boys and girls. This is inevitable where large numbers of little children are in the same classes with the larger ones, as is practically always the case in the upper grammar and lower high-school grades. The teacher unconsciously adapts herself to the level of the smaller and physiologically younger children. They are more docile and receptive than their more fully developed classmates. The latter are less willing to be led; the command of the teacher to do a task is no longer a sufficient incentive and unless they can see some

further reason for doing the work, some way in which the work fits into and satisfies some personal aim or interest, they are not likely to pursue their work in school with much enthusiasm. They are just coming into the age when it is natural for the normal children to wish to plan and do things for themselves and if the school does not afford opportunity to develop such impulses they will find satisfaction in various ways outside of school and to the detriment of school work.

Much has been written and still more said of the danger of imposing too much work, either

May the maturing scholar be overworked?

mental or physical, upon the boy or the girl in this transition period of life. It is evident that the

period involves a severe strain on the youth's physical resources and that he should not under the circumstances be overtaxed. If the transition comes sufficiently early, however, and is preceded by a proper accumulation of vital force through a hygienic and easy childhood there seems to be no good reason why he may not continue his school work with increasing rather than diminishing efficiency. He is, it is true, in a state of unstable equilibrium and needs to be dealt with tactfully. He may easily be upset and his development disarranged if he is subjected to the wrong sort of influences; if, for instance, his parents or teachers nag him about little things, or if his emotional surroundings are more or less exaggerated. What he needs, above

all, is calmness, sympathy, freedom from intense excitement of any kind. He is apt to be a veritable powder magazine of emotions, and if these are, through unwise treatment, allowed to explode they can spell only disaster, sometimes temporary and sometimes permanent. The children who suffer most from overstrain in early adolescence or who seem to suffer much mental retardation, are probably those, then, who either come into it without sufficient reserve force or those who are developing later than usual so that they must expend an abnormally large amount of energy in their comparatively short period of rapid growth. As Boas says, the crowding of mental and physical development into a short space places a considerable burden on both body and mind.

In all our work with boys and girls, we must distinguish between their capacity to do and what they really should do. Children of three years, for example, can **Difference between what they can do and should do** and have been taught to read, but it is very doubtful whether the wear and tear involved in this process is not greater than the gain; whether the growing eyes are not subjected to an undue strain; whether the close attention involved in interpretation of the printed symbols is not cultivated at the expense of activities and interests which would be far more productive of mental growth.

The same is true of the period of puberty. The



Group of Thirteen Year Old Boys of Normal Development. The One at the Right is Mature, the Others are Close to the Maturing Stage

mere fact that the boy and girl can make excellent grades in their school tasks is not **Should be free from worry; normal motives** to be taken to mean that they should be pressed or even burdened with heavy work at this time. Children are now consuming a large amount of energy in growing. Many of them are going through an intensification of mental and physical processes, but these processes are not sufficiently well established to be in perfect equilibrium. It is for this reason that the youth should not be subjected to pressure. He can not afford to worry over his work. Under normal circumstances he ought to be able to get along in school effectively; but his own inclinations should, to a certain extent, be followed as to whether he should do more or not. We should be sure, however, that his desire to do extra work is not brought on him by the pressure of parents or by his own desire to make certain grades or to win honors of any sort. If these motives appeal to him, as they easily may to certain temperaments, he should be shielded from them.

What both sexes need more than all else is freedom to perfect the physical changes that are in **Importance of physical exercise** process. They need plenty of fresh air, exercise, long hours of sleep, a goodly fund of objective and active interests and wholesome companionship. All of these things are the best of means for warding off morbidness in thinking or any undue dreaminess. There

is no special reason why the normal youth may not do vigorous work if he can do it without strain, pressure or worry.

Many studies of school children at this period reveal a great amount of illness and nervous dis-

orders, especially among girls.
Explanation of
physical weakness But physicians and discerning
sometimes noted teachers unite in saying that this

tendency to physical breakdown is due to an unwise ordering of life outside of school. The actual school studies do not make heavy demands on the pupils. While a few put in an excessive amount of time studying outside of regular school hours, sitting up late at night to get their lessons, this can hardly be said of the average high-school pupil of to-day. An investigation of the study habits of nearly twelve hundred high-school pupils in four different high schools of varying sizes in Iowa, brought to light the fact that comparatively little studying was done at home.

TABLE V

HOURS OF STUDY PER WEEK OUTSIDE OF SCHOOL OF NEARLY 1,200
 HIGH-SCHOOL STUDENTS

Hours	0-4	5-8	9-12	13-16	17-20
Number of pupils.....	93	643	324	103	23

It will be seen that the most common amount of time devoted to study outside of school by these

pupils is five to eight hours the week—certainly not an excessive amount.

As far as these figures go they seem to support the contention of teachers that it is not the school work, as such, but the outside activities which cause the heavy drain on the pupil's resources.

Of these outside activities those of a social and recreational nature are responsible for more trouble than home work of any sort. Our **Complexity of modern life** modern life is becoming far too complex for the good of the boys and girls. More and more are the social activities proper for adults indulged in by children in their early teens. Parties, receptions and dances of the grown-up type, with late hours and excessive finery, occupy far more of the attention of high-school pupils to-day than they did fifteen or twenty years ago. Undue indulgence in social matters is particularly hard to control in the case of children of this age. They seem unable of themselves to appreciate the need of a proper balance in what they do. It is a period of intensity devoid of the restraints that at a later period will produce a degree of moderation. Children now feel unusually important and entirely able to judge for themselves what they should do or refrain from doing. They rebel at restrictions of teachers and parents and seek ways to slip past them. Teachers and parents need now, of all times, to work together to secure a proper control over

the children, a control that will not be repressive but will seek to secure a wholesome distribution of their energies and a well balanced growth.

Unless there is mutual understanding and co-operation between the school and the home the ef-

Cooperation of school and home essential forts of each will be apt to be quite futile. Many well intentioned, sensible parents are completely swept off their feet by the inordinate and foolish demands of their boys and girls for expensive clothes. The girl tells her mother that her classmates wear different dresses and different shoes every day. She simply must do as they do or be left out of everything or constantly snubbed as only high-school girls know how to snub. The mother is at her wits' end. She knows the family finances can scarcely be stretched to meet such a demand, but what can she do? She does not wish her girl to be different from the others, to be considered queer, and so she weakly submits. Very likely almost every other mother who sends a daughter to the school feels as she does but, all alike, they are helpless. The teachers, also, doubtless deplore the extravagant dresses and habits of the pupils. But they can of themselves do nothing. If all could get together and discuss the common problem with its attendant dangers for the pupils, it would be a long step toward working out a policy of common sense, a policy undoubtedly connected

vitally with the physical and mental welfare of the children themselves.

Author referred to in the text:

- (1) Crampton, C. W., *Influence of Physiological Age Upon Scholarship. Psychological Clinic*, I: 120, 1907.

CHAPTER V

THE MENTAL CHANGES OF THE TEENS; THE EARLIER YEARS

WHEN any period of life is set off for special study there is danger of drawing a picture that is exaggerated and untrue to reality. This is especially the case with both **The illusion of distinct periods** childhood and youth. In our eagerness to state clearly the traits of the period with which we are concerned, we tend to draw lines of definite separation between what has come before and what comes after. This indeed has been a vice of all those who take up any part of a series of changes for particular study. The geologist at first blocked off the history of the world into definite periods. There was, for example, the Silurian, the Devonian, the Carboniferous, each clearly separable from what preceded and from what followed. But the later geologists have come to see that there is no such clear demarcation of periods. Each stage in the history of the earth gradually merges into the one next to it by a multitude of transition periods. The same tendency may be noted in the study of the history of religion, or of industry or of any human institution. Here again,

at first, stages were set off; for example, men were said in the beginning to be worshipers of fetishes, then they made gods out of great natural objects, as the sun or the ocean and, by a succession of steps, arrived at the worship of a single God who loved mercy rather than sacrifice. But here also the idea of separate periods and of definite sequences has been proved to be an illusion. Here, as elsewhere, there is only a continuous process of change and definite lines of separation can not be drawn in one place any more legitimately than in another.

In just this same way the so-called periods of life from birth to maturity exist largely in the mind of the over-eager observer. The **Development a** continuous process more we know about human nature, the more are we convinced that development is a continuous process. The child is, it is true, different from the youth, and the youth from the man, but these differences have come about through infinitely minute gradations rather than by great leaps. Much has been made, for instance, of the difference between the religion of the child and of the youth, and yet everything to be found in the moral and religious point of view of the youth had its beginnings and its incubation in childhood. There is no abrupt shift from one to the other. This does not mean, of course, that no time of life has any striking or distinctive characteristics. We are striving rather to emphasize the fact that

what we always find, when we look carefully, is continuity in development rather than abrupt transition.

Even on the physical side of child development, this is perfectly true. The time of rapid growth, **Illustrated in** at the period of puberty does not **physical growth** normally begin suddenly nor does it end all at once. Even though the actual rise in the curves of height and weight occur with seeming abruptness, the child has, in the years previous, been getting ready for this accelerated development. He has been laying by a reserve of energy, as is evident from the fact that when he has not lived as a child should, having his due share of nourishing food and of play and of sleep, when he has been shut up in unhealthful quarters and has had to work beyond his strength, he is apt to fail to develop as rapidly as most children do in the early teens. His pubertal development is, as we have seen, deferred and may be relatively abrupt.

In fact, wherever there are sudden and fundamental changes there is every reason for believing that they are abnormal, due to unnatural conditions of some sort which have blocked the normal development and outgo of energy at its appropriate season. Just as the course of a river may be blocked by a dam until it rises sufficiently, when it rushes on with a roar and continues in its way.

The development of the sex instinct at puberty is no exception to this rule. The manifestations

**In the develop-
ment of the
sex impulses**

of this impulse at that time are usually so striking that psychologists have tended to point to it as an instance of sudden transition. The little child has been assumed to be sexless in all his interests. The meaning of sex suddenly, it has been held, dawns upon him at puberty. This view is quite erroneous. The sex life of the child begins at birth. Gradually, through the years of childhood, differentiation goes on, not merely in the physical organism but also in mental attitudes, interests, in general point of view. One of the important contributions of the study of early and later childhood has been the discovery that sex impulses and interests appear, normally, very early and develop as an integral part of the childhood self. The period of puberty, therefore, marks no abrupt transition; but is simply the time when the long antecedent development emerges, occupies a larger place in the child's horizon, and attracts the attention of the observer so that he drops into the fallacy of imagining that something entirely new has suddenly come into being.

This idea of abrupt transitions has been further fostered by certain special cases such as religious

**Reasons for be-
lief in abrupt
transitions**

conversions, which have been explained as rapid shifts in the point of view. An old self is suddenly cast off and a new one as quickly taken on. Here again the observer is in danger of being

deceived by external appearances which are easy to observe but hard to evaluate justly. A spectacular emotional experience takes even the youth himself by storm. He imagines he is almost a new creature. But gradually his old habits, ideas, interests and emotions assert themselves, and he would know, if he could properly interpret himself, that this is only an indication that the apparently involuntary change which he has passed through has been a quite superficial affair. He is not radically different from what he was before. He may have got a new ideal, a new impulse to live differently, but on sober second thought it is found to be organically related to all that he was before. In so far as his experience is vital and proves to be permanent it is found to be merely an external symptom of a deeper series of changes in his interests which have been going on gradually and, hence, mostly unnoted. The "sudden experience," is, as it were, a hitch in the stream, or current, of one's life due, perhaps, to some interfering or unusual circumstance in the environment such as a revival meeting, a new teacher, a change in material fortune, some new book, in fact, due to any of a thousand possible social forces which may chance to play on him at just the psychological moment and thereby bring vividly to consciousness desires or purposes hitherto only dimly appreciated.

This is the point of view from which we shall

approach the study of the development of youth.

Youth is a transition period, but no more so than is any season of life, so long as life continues

The point of view of this study to be truly alive, for life is, in its essence, change and progress for better or for worse. Outgrown shells of old ideas, old friendships, old ideals are being constantly left behind. But, alas, all do not attain a dome more vast nor the freedom which the poet longs for.

Youth, then, is not distinctive in being a time of transition, and yet it *does* have its distinguishing features—features, however, which are the culminations of all the individual's previous development and of his heredity as well. It has its particular problems of development which are also the outgrowth of the past and which refer specifically to what is about to come. The transition of youth is, of course, different from any other transition of life—behind is childhood with its narrow horizon, ahead is manhood and womanhood—and no one can doubt that the change from one to the other involves many problems of readjustment which demand the serious consideration of both parents and teachers.

One of the obstacles which confront one when one attempts to describe the mental characteristics

Difficulty of describing the period of youth and changes of the teens is not merely their bewildering multiplicity but the even greater diffi-

culty of discovering, with any accuracy, what the characteristics actually are. The youth is often an adept at concealing his real self. If we try to find out what he thinks and feels he will as likely as not fail to tell us the truth, and without malice either, for it is a species of instinctive self-protection. When, then, an enthusiastic investigator gathers statistics about the likes and dislikes, the activities, interests, habits and ideals of high-school boys and girls, when he arranges them in tables and computes averages and relationships he is apt to be possessed of material of very uncertain value. If the material is entirely true, the chances are it is also entirely commonplace, what everybody has always known and taken for granted. The bare figures, stating averages, tendencies, etc., do not in any wise give a true picture of the real boy and girl. Of course the real boys and girls may not be in any wise unusual. They are probably just *average* young people, and the real life of average people is not usually spectacular. Their experiences do not usually furnish material for good "stories," unless surrounded by some sort of artificial glamour such as the so-called realistic novelist throws over them, thus leading us to feel that common life is something other than it really is.

In a word, the basic difficulty is how to find out the true inner self of the youth, what is actually
The "average" brewing in his mind down be-
youth neath the level of commonplace

behavior. If the youth himself is liable to deceive us, how are we to find out anything? How are we to avoid the arid commonplaces of the scientist who prides himself in sticking to the facts? We, also, are after facts, but we must beware of two extremes; on the one hand we should not assume that the highly interesting and intense development in some young people is found in all alike; on the other hand we should not ignore completely the unusual experiences as of no value for helping us to understand the more ordinary types of youngsters.

We shall not, in the illustrations cited in the following pages, pretend that they are typical, as they stand, of youth generally. We shall assume rather that in them **The value of the less usual types** we may get, in vivid relief, many suggestions as to the underlying nature of average boys and girls, suggestions as to the tendencies, impulses and so forth, which may never stand out clearly enough to be separately recognized and which yet actually operate to shape the course of the life of the adolescent boy or girl. As we have suggested, most youths are *average* youths but, nevertheless, in even the average youth there is in all probability something distinctive and interesting if we could know how to find it. We know this best by the autobiographies of youth which men and women are often able to give us in retrospect. One man in writing of his own youth and its strange mix-

ture of outward unconcern and inner perplexity and often melancholy, says, "It may be inferred that my above-stated belief that all boys have their lonely times and their hard periods is based only on my own experience, while the prevailing belief is that most boys are careless and akin to the vegetable in their lack of serious concern. Those who hold that view do not know boys well. They will deceive the most watchful with their unconcern, but the moment they are alone, and are no longer *acting* a part, they are another order of being. Catch the careless boy unawares and touch his quick with skilful finger, and you will always find that his tears flow extremely easy." (1)

This apparent callousness and indifference of boys and girls in their early teens, when they are

**The seeming
unconcern of
the early teens** brought face to face with circumstances to which we older people think they should respond readily

and sympathetically, is often met with and is largely a protective measure which might be said to be almost instinctive. The boy usually feels that he may be unable to say or do the right thing; he dreads to make a mistake or to seem weak or sentimental, and so he often maintains a stolid indifference to an appeal which he really feels keenly. He does not want to appear "like a fool," and so he tries to avoid looking like anything. A very good illustration of this attitude is furnished by a boy of thirteen, who had committed some slight misde-

meanor in school. He was at once heartily ashamed of it and resolved never to do it again. Although the teacher had seen the offense, she said nothing about it at the time. The youngster, however, did not escape. A few days later the teacher told him to remain after school. "She reasoned with me," he says, "and I suppose she expected me to cry, but that wasn't in my line. I was silent and hung my head in shame, and if she had had the good sense to let the matter rest there, things might have been very different with me—but she went on lecturing me." Finally his contrition changed to defiance. The teacher noted the changed attitude and concluded, since he showed no signs of being impressed by scolding, he would have to be whipped, and a savage beating followed, during which the youngster maintained the same attitude of sullen defiance. If he had only broken down and cried, the teacher would have been satisfied. But he, as all healthy boys would have done, felt that this was an assault upon his personality and it was far more vital to his own sense of personal respect to put up a show of external indifference than to acknowledge his fault by breaking down as the teacher expected him to do. (2)

This instinctive withdrawal into one's self; this hiding behind a barrier of apparent indifference is possibly more apt to be a characteristic of the early years of the teens than of the later. These years from thirteen to fifteen are, for most boys and

girls, as we have seen, the years of physical maturing. The center of the personality is physiological rather than mental. As one writer has well expressed it, it is "a trying period when the child has become well cognizant of the practical world, but has yet no hint of the gorgeous colors of youth. At thirteen, for instance, one has the world pretty well charted, but not yet has the slow chemistry of time transmuted this experience into meanings and values. There is a grossness and materiality about the following three or four years that have no counterpart until youth is over and the sleek years of the forties have begun. How cock-sure and familiar with the world is the boy or girl at this age! They have no doubts, but they have no glow. At no time in life is one so unspiritual, so merely animal, so much of the earth earthy. How different is it to be, a few years later! How shaken and adventurous will the world appear then! For this waiting period of life the virtues are harder to discover. Curiosity has lapsed, for there do not seem to be left many things to be curious about." (3)

It is at this time that the child, just emerging into youth, seems strangely stolid. He has passed the unquestioning responsiveness and frankness of childhood and he has not yet felt enough of the up-rushing vital force of youth to step out in any positive way or to assume any definite attitude of his own.

The times and seasons of every common trait

will vary much. We have seen how great the

**Variation in
individuals**

variation is on the physical side.

Some children mature early and some late. It can not be otherwise in the case of the mental changes. If this period of unresponsiveness occurs most often between thirteen and fourteen, it is closely associated with the period of puberty. The new impulse to physical development leaves the mind at first uncertain of itself. Caught by an uprush of unfamiliar and ill-understood impulses, the boy may withdraw more to himself and seem curiously indifferent to outward appeals or he may take on, more or less genuinely, a wild daredevil attitude. He will take peculiar delight in breaking through the restrictions on his behavior, to which he has been subjected in childhood; he will even ruthlessly violate the principles of good conduct which careful parents have striven to instil into him as a child. His "wildness" at this time may be of a fairly harmless variety, such as indulging in mild profanity, smoking cigarettes, fighting, playing pranks and practical jokes, running away to go swimming or fishing, and in all having a delightful sense of how wicked he is. Such a boy, if reared in a religious atmosphere, will, in his more serious moments, wonder at this time if he will ever get to Heaven and say to himself that he doesn't care whether he does or not.

In the past, the larger number of boys and girls of these transition years who were in school at all,

Peculiar difficulty of school adjustment

were in the upper grades of the elementary school. But to-day, larger and larger numbers are finding their way to the high school. Wherever they are found, however, they present peculiar difficulties to the school. They lack the docility of childhood and the fine idealism that comes to most young people soon after puberty. These are the years of serious retardation in the grades, the years in which many pupils drop out of school altogether. It is most unfortunate that the completion of the elementary-school course comes for so many at such a time, for then of all times it is easiest for the youth to conclude that he does not care to go to school any longer or, if he continues in high school, he then finds it harder to adjust himself to the methods of study and recitation and to the studies themselves, which the high school thrusts upon him.

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- (1) Jones, R. M., *A Boy's Religion From Memory*. Philadelphia, 1900.
- (2) Shields, T. E., *The Making and Unmaking of a Dullard*. Washington, 1909.
- (3) Bourne, R. S., *Youth and Life*. Boston, 1913.

References for further reading and study:

- Burnham, W. H., *The Study of Adolescence, Pedagogical Seminary*, 1:174.
- Kirkpatrick, E. A., *The Individual in the Making*, Chapter VIII.
- Slattery, Margaret, *The Girl in Her Teens*.

CHAPTER VI

BROADENING VISION

"In the smallest past we find an inexhaustible mine when once we begin to dig at it. A confused disordered story—the little made large and the large, small, and nothing showing its inward meaning. It is not till the past has receded many steps that before the clearest eyes it falls into coordinate pictures. It is not till the I we tell of has ceased to exist that it takes its place among other objective realities, and finds its true niche in the picture. The present and the near past is a confusion, whose meaning flashes on us as it slinks away into the distance."

—Olive Schreiner, in *The Story of a South African Farm*.

THE years which immediately follow on puberty are possibly of greater general interest than the pubertal period itself. Not that the years from fourteen to twenty are any more important than the earlier years, but their characteristics are more striking and more obviously related to the trends of mature life. The intensity of the early teens now takes more definite shape. It is the time when the personality of the *man* and the *woman* begins to appear, and the development of personality is always interesting. Even though that personality may later settle down to very commonplace lines, in its initial stages it is always full of promise. So true is this that every thoughtful observer of boys and girls

of these years has felt the truth of Emerson's exclamation—"How many promising youths!"

The earlier years of this period are the traditional high-school years. They are also years when **The high-school years** tens of thousands of boys and girls go to work, entering either a juvenile occupation or definitely taking hold of the beginnings of some trade, business or profession. It is then that the youth emerges from the somewhat animal-like crassness of the pubertal years and begins to think of his social relationships, his duties and the rights and wrongs of acts.

The writer knows a man who tells of himself that he was wild and uncouth in his tastes during **New interests develop** the early teens. He wished to be in the woods, to live like a hunter; he cared nothing for carefulness of dress and, in fact, refused to wear warm clothing, even in winter. At about the age of sixteen, however, he seemed suddenly to be born, or precipitated, into the world of social relationships. What the occasion of the change was he does not state, but it came over him in the course of a week or two. He began to want to dress properly, to wear neckties, to black his shoes, to be *with people* and to share in their life. This is an extreme case, but it illustrates a change which comes with more or less intensity to every boy and possibly to every girl, a change from the narrow life of the child to the larger life of the adult.

What are the characteristics of this new life when it first begins? So diverse are the traits, the tendencies, that it is hard to find **Abundant life** in them any other unity than that of "abundant life" and eagerness *to be* and *to do*. The childhood-self, shell-like, has slipped off, and the young animal stands with eager expectancy before life's possibilities. The season is, then, in a way the flood-tide of the energies of life, a time when all the vital forces which have centered in the making of this and that personal life reach their highest pitch, when they acquire the momentum and the direction which they will keep throughout the rest of their course.

It is not meant that the energies of youth are as efficient in the work of the world as they may be a little later. They are as yet undisciplined, unfettered, and the problem of the teachers is to harness this abundant life without quelling it. Of course there are large numbers of youths whose lives seem quite ordinary, having apparently nothing to distinguish them from the earlier or the later years, whose "experiences" would scarcely make a "good story." And yet the rising tide comes even to the average youth, rising so gradually, perhaps, that he is never clearly conscious that a change is taking place. Moreover, even though many youths may be quite commonplace in their experiences, the fact remains that at no period of life do unusual or highly wrought experiences appear more fre-

quently. It is a time when we *expect* intense emotions, strong reactions and, even though the tide may not rise high in each boy and girl, that it does rise high in many, is some indication of what youth is, is some proof that it is different from other periods of life. Is it fair, then, to describe youth in terms of the more intense experiences of possibly the minority? It is indeed, if we interpret our data aright, not as typical experiences which come to all in equal degree, but rather as indicating tendencies, transitions, modes of action, interests about which all youthful experiences are grouped with varying shades of intensity.

The central fact, the fact common to all adolescents, whether average or exceptional, is the transition from childhood to manhood and womanhood. At some time in the early teens—for some earlier and for some later, for girls nearly always a year or two earlier than for boys—the self of childhood dissolves and a new self is born. In the case of some children this change is more or less sudden—so sudden, in fact, that the child himself is startled by the rapid shift in his point of view. Perhaps it would be more correct to say that the transition is, in such cases, effected through a series of changes, one of which stands out and is always remembered as typical of the shift from childhood to manhood. Sometimes the change is so gradual that one knows only after a number of years that

one is somehow different from what one was to start with, that now one no longer looks at the world with the eyes of a child, but when or how one has changed one can not tell.

Sometimes the change is largely intellectual; sometimes it is strongly emotional and throbbing with rebellion against authority, **Varieties of change** with fierce passion and lofty idealism. But even such intensely wrought changes are often forgot^{ten} and the man is apt to assert there was nothing unusual about his youth.

It is impossible to state with any accuracy the proportion of youths whose early adolescence is marked by striking intellectual and emotional changes, but it is probable, as we have said, that "high-light" experiences are the exception rather than the rule. The floods rise gradually and the youth is borne aloft so gently he usually does not give any thought to the matter. But even if he does not appreciate the upheaval in himself, he behaves differently and needs to be treated differently than when he was a child. Whatever the change may be like, it always occurs in one way or another, and the years involved are always important ones. They are years that demand the special attention of older and wiser heads that no mishaps may occur.

The little child develops, in the main, as an animal and in spite of his environment. Many untoward **New significance of social influences** influences he can recover from without permanent injury. But

the youth, born into the great world of social relationships and duties, is played upon by countless external forces which do actually divert his energies this way or that and determine the things he shall value and strive for. The youth's native ability counts, of course, for as much as it ever did; it is the vitalizing, drawing force in the whole process, but it furnishes only the raw material for the well-rounded adult life. It will largely depend on the opportunities afforded, on the play of educational and social forces, what becomes of this native energy.

By the first birth, the child comes into a physical environment, a bundle of primitive appetites and impulses. He demands with unreasoning imperiousness that his animal wants be satisfied. He is eager to use his limbs and voice, and this eagerness brings him into contact with a wide variety of experiences. He learns how to act in the world of physical things that surround him, he learns to understand people after a fashion, but after all it is a narrow life he lives, at the best. He is surrounded by the great grown-up world, but his understanding of it is at most superficial. It makes various demands on him which he only partly understands. As he approaches physiological maturity in his early or middle teens, however, he feels the throbbing of new impulses. The world of men and women gradually opens up to him and he is finally born ✓

into it. This world is a larger and more complex one than any he has hitherto known. He faces a new problem, that of learning to understand, to live, to move, in short to find himself in this larger world of social relationships, of men and women.

The study of adolescence has two possible objects, the one, to discover as far as possible the natural tendencies and characteristics of the period, and the other, to determine how they can best be brought to a successful issue in maturity, that no untoward events or influences may dwarf the budding spirit of maturity or start it to developing along lines which will harm or destroy its future efficiency. The birth of the new self in the teens is often fraught with quite as much danger as the birth that first brought the child into the world.

The new self of the teens is a new creature and yet not absolutely new. It is built upon the self of childhood, and its successful issue depends quite as much on the child who has preceded as on the influences which surround the youth himself. If the childhood of the boy or girl has been normal; if it has unfolded in the midst of wholesome surroundings, the prospects are auspicious for a similar growth through the critical period of the teens. The stage of physical maturity will be reached at the proper time and passed over at the proper rate. If the child has been treated as a reasonable being, if he has

been guided rather than driven, if he has had suitable opportunity to express his impulses rather than had them repressed by the stern authority of unsympathetic elders, he should pass the critical period serenely and joyously. If his earlier treatment has been of the harsh repressive type his manhood may be stormy and tumultuous. If for any reason his physical development has been interfered with in childhood, either through lack of proper food or because of disease or exacting labor, the transition to maturity may be deferred two or three years, and then his all too slender resources will be taxed to their utmost to do in a few short months, perhaps, what he should have had at least a year, and probably more, to accomplish. In short, the kind of childhood one has had largely forecasts the sort of youth that may be expected.

No one has perhaps caught the spirit of youth more truly than has Jane Addams, in her description of her journey, as a girl, to Madison, Wisconsin, to see Old Abe, the war eagle. "We started," she says, "one golden summer's day. . . . The entire journey to the veteran war eagle symbolized that search for the heroic and perfect which so persistently haunts the young; and as I stood under the great white dome of Old Abe's stately home, for one brief moment the search was rewarded. I dimly caught a hint of what men have tried to say in their world-old effort to imprison a space in so divine a line

**The quest of
the youth**

tion of her journey, as a girl, to
Madison, Wisconsin, to see Old

that it shall hold only yearning devotion and high-hearted hopes." (1)

All of us who have ever had a season of youth find it easy to say many things about it, and yet

His spirit characterized

we must not let our descriptions too readily run over into fixed generalizations. The descriptions, nevertheless, are of great value, and those that we find in poetry and general literature often throw much important light on the lives of these boys and girls whom we know and have to teach. The following words of a recent writer, himself barely past the period of youth, are suggestive:

"How shall I describe youth, the time of contradictions and anomalies? The fiercest radicalisms and most dogged conservatisms, irrepressible gaiety, bitter melancholy—all these moods are equally part of that showery spring-time of life. One thing, at least, it clearly is: a great, rich rush and flood of energy. It is as if the store of life had been accumulating through the slow placid years of childhood, and suddenly the dam had broken and the waters rushed out, furious and uncontrolled, before settling down into the quieter channels of middle life. The youth is suddenly seized with a poignant consciousness of being alive, which is quite wanting to the naive, unquestioning existence of the child. He finds himself overpoweringly urged to self-expression. Just as the baby, born into a 'great, blooming, buzzing confusion' and

attracted by every movement, every color, every sound, kicks madly in response in all directions, and only gradually gets his movements coordinated into the orderly and precise movements of his elders, so the youth, suddenly born into a confusion of ideas and appeals and traditions, responds in the most chaotic way to this new spiritual world, and only gradually learns to find his way about in it and get his thoughts and feelings into some kind of order." (2)

In these words we have a vivid suggestion of what youth is in many a boy and girl, in so far as it is distinct from other periods of life. If the majority of boys and girls pass through no such intense period, it means only that, in so far, their development during youth lacks any clear demarcation from later life. But even though the person may, in after years, regard his youth as uneventful or as set off in no way from the rest of his life, we can hardly believe but that he has forgot; that he *must* have had some time, even though short, of budding aspiration and fervid enthusiasm, some time when the self of the child changed into the self of the man.

That there is such a transition time for every individual, even though gradual for most, and with **Spiritual intensity high** widely differing characteristics, none of us can doubt. That in many cases the period is one of great intensity of life both intellectually and emotionally, many of

us can testify, and the biographies of many men and women corroborate our own experiences. The testimony of the poets also is not to be ignored. We are always interested in what the poet may have to say about this or that period of life, because, if he is sincere, if he has really lived, his words often illuminate dark pathways and his flashes of inspiration suggest values and give a perspective to facts which the rigid scientist may altogether miss.

Let us turn our attention for a moment to the preceding quotation. What discriminating teacher of boys and girls has not noted some of the characteristics there mentioned? Every one of them is a natural outcome of the transition from childhood to manhood. The child is literally swamped with the rising tide of vital energy within himself—swamped also in the midst of a complex world of social relationships and duties, whose inner workings and compromises he as yet knows nothing about. The ideal of the larger life comes to the youth sometimes suddenly, sometimes gradually. For the time being he does not know how to act. It is not strange that his responses should be chaotic and often characterized by ill-directed enthusiasm.

A great many of the difficulties that confront the teacher and parent might be relieved in some degree

The need of conserving the childhood values	if they were to bear in mind all that is involved in this season of mental readjustment. Physical or sexual maturity always precedes mental maturity.
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The latter, furthermore, is different in that it requires a longer period and is dependent for its outcome on educational influences. Something at that time occurs in the life of the youth analogous to the experience of the immigrant suddenly plunged into the swirl of an American city. The peasant life of Europe, with its primitive modes of industry and its narrow intellectual horizon, corresponds to childhood. Let this peasant be transferred to a noisy throbbing factory town in America and we find him confronted with most serious problems of adjustment to the new industrial and social order. He is at first dazed and staggered by the mad rushing life about him; where can he take hold, what can he do? How often it occurs that the skill and the character of a high order, which he brings with him from beyond the seas, find no place whatever in the American city, and he is compelled to eke out his existence and is crushed down to a lower level of vocation and of living than he knew in the old home, narrow though that was. The problem of the immigrant is that he shall not lose everything of value out of his past as he finds himself in the crasser, even though larger, American life. The swirling American city needs just the fine qualities, the skill in workmanship, the social morality, the fine traditions of the immemorial past that the better immigrants bring with them. If they are to be transformed into good

American citizens it will not be by ruthlessly casting off as rubbish all their past lives, but rather by building upon them as a foundation the structure of their American citizenship, for, as Goethe says, "Reverence for the past is the basis of all sound progress." (1)

In just this manner is a normal transition from childhood to manhood to be sought. Although at first it seems that the child-self must be cast aside like an outgrown shell in order that a new and totally different life may be entered into, this is not ordinarily what should occur. It should be rather through a series of adjustments and extensions of the childhood life that the youth comes to manhood.

The life of the normal child should furnish a fund of experiences which will be of permanent value to him as he passes through life. It too often occurs otherwise, however. The demands of the new life opening up to him seem utterly different from anything that he has as yet known. If he has had a reasonably normal life as a child, this absolute cutting loose from childhood morality and ideals is decidedly unfortunate. One of the great educational problems of youth is, therefore, to effect the transition in such a way as to preserve in the life of the adult all the finer qualities of childhood experience.

The happy solution of this problem demands a genuinely sympathetic attitude on the part of both parent and teacher, that is, a real understanding of each individual child, for the problem is always more or less different with each individual. But sympathy is not the only quality demanded. It is quite as essential to understand the place of wise guidance. The youth's mental life is rapidly enlarging and is, in these middle teens, being stirred to unusual activity. It is natural for him to look back on his childhood-self and all that was associated with it somewhat disdainfully. This attitude must be appreciated by the older people who surround him, but it should not be regarded as something final. It is rather to be taken as a symptom of a change, which may be good or bad according to the way it is treated or guided.

Both boys and girls in their middle and later teens are gaining new ideas and new points of view so rapidly that they easily imagine their experiences are different from those of any one else, especially that they are different from any their elders have ever had. The impulse to assert themselves positively is very strong, and within limits this is not a bad thing. How ready they are to give information of all sorts in the family, and to expect respectful attention! When they do not get the response they think they should have they easily imagine that their parents or teachers do not "un-

derstand" them. Some children will then develop the habit of concealing their real interests and aims; they will turn in on themselves and become morose and given to self-pity. Others will become all the more aggressive and will be obsessed with a determination to reform their parents and surroundings generally. They think they know more than their mothers, they criticize their fathers, give advice to their grandparents and are "willing to decide all questions for the younger members of the family." (3)

All such attitudes, we say, must be dealt with, not harshly and summarily, but as symptoms of the

**Significance of
the self-assertion
of the youth**

struggle of the child to find himself in a larger circle of relationships and duties.

The teacher or parent who "understands" will not blame the boy for this eager desire to assert himself, but will strive, in various ways, to help him see that the most direct road for him to an effective manhood will lie in the direction of continued sympathy with his home life and continued respect for his parents. Humble though their lot, and narrow though their vision may seem to him to be, he should be led to see something fine and noble in all their toil, something into which the roots of his own being go, and to which he must ever be loyal if he is ever to be a true man himself. Self-evident this seems, and yet how many boys and girls, through the influence of high-school and college as-

sociations, grow away from their parents and their home surroundings! When times of difficulty and struggle come to such as these, we find them turning to some friend outside the family for advice, with the thought that such a one will "understand" better than can the father or the mother.

Mistaken as this whole attitude is, it can so easily develop as the boy or girl journeys from childhood into maturity!

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- (1) Addams, Jane, *Twenty Years at Hull House*.
- (2) Bourne, R. S., *Youth and Life*.
- (3) Slattery, Margaret, *The Girl in Her Teens*.

For further reading and study, consult the references given at the end of Chapter VII.

CHAPTER VII

THE BIRTH OF A NEW SELF

THE great problem of the youth is that of finding himself in the world of work, social enjoyment and duty that surrounds him. This is not altogether a problem of adjustment. It is quite as much a problem of building up a new personality in which shall be fused all that is vital in the world about him with that which is unique or original in himself, for in every human being something new, something individual, is brought into the world. And progress is possible in so far as each youth *does not merely conform to life as he finds it, but makes it over to some extent* in terms of himself.

The normal adolescent feels keenly the impulse *to be himself*, to question all traditions and all assumptions, to think things out for himself, whether it be in literature or in art, in religion, in morals, or in social duties. And his impulse is good, even though he may find, in the end, that his conclusions are not so very different from those of others before him. It is through this impulse to think for himself that

he *finds* himself and proves his right to be a man among men.

Very characteristic mental attitudes are apt to attend the process of finding one's self in the larger world of social relationships, attitudes not always appreciated by teachers and parents. He feels at first a vague unrest in his groping for a larger life. The adolescent is traditionally a dreamer. He longs for that which he can not express even to himself. He feels somehow that he is face to face with a *great thought* which, thus far, no man has ever grasped; he feels he is about to solve the riddle of existence, which hitherto has baffled even the world's greatest minds. The poets who have begun to write in their youth give frequent expressions to this haunting sense of being on the verge of a great discovery. No words could more aptly express this feeling than those verses of Tennyson, beginning:

“Break, break, break,
On thy cold gray stones, O sea!
And I would that my tongue could utter
The thoughts that arise in me.”

This little poem is a typical exclamation of adolescence, not merely in its suggestion of some great thought which grips the soul, which the youth longs to put forth into words, and which yet seems to baffle all his power of expression, but also in the sense of something mysteriously beautiful and

significant in the play of children on the beach and in the passage of the ships to their haven under the hill.

Longfellow, in such poems as the *Prelude* and *My Lost Youth*, strikes a similar vein, that of being overwhelmed with meanings which he longs to express but which defy his capacity to put into words.

This keen sense of unfathomed, haunting mystery which the youth feels and which he imagines

Sense of mystery he, of all people who have lived,
has somehow chanced to discover
is in part the expansion of his being toward the charm and mystery of the opposite sex. Perhaps it is the first manifestation of sex love, not of course understood as such, but indicating nevertheless the enlargement of interests and ideals which must be at the basis of all healthful development of his relations with woman.

We have emphasized the gradual character of the transformations of youth and yet there are
Crises in development nodal points or crises when the aspect of things seems to change pretty definitely. Not that there is necessarily any sudden break in the course of development. It is rather that hidden forces, as we have said, gradually come to the surface and make themselves evident and, because we have not noted them before, we are often inclined to think that something new has been interposed. These crises, or turning points, are rather analogous to the experience of a traveler

who arrives at a turn in his road that brings to him a new vista or who, surmounting a range of hills or a mountain, sees for the first time a winding river and a fertile valley beyond.

Such a crisis in the life of a group of boys and girls in their middle teens is thus penetratingly described by Mrs. Deland. "Elizabeth's long braids had been always attractive to the masculine eye; they had suggested jokes about pigtails, and much of that peculiar humor so pleasing to the young male; but the summer she 'put up her hair,' the puppies, so to speak, got their eyes open. When the boys saw those soft plaits, no longer hanging within easy reach of a rude and teasing hand, but folded around her head behind her little ears; when they saw the small curls breaking over and through the brown braids of spun silk, clustering in the nape of her neck; when David and Blair saw these things, . . . something below the artless brutality of the boys' sense of humor was touched. They took abruptly their first perilous step out of boyhood. Of course they did not know it. . . . The significant moment came one afternoon when they all went out to the tollhouse for ice-cream. . . . As they sat eating their cream together, Blair suddenly saw the sunshine sparkle in Elizabeth's hair, and his spoon paused midway to his lips. 'Oh, say, isn't Elizabeth's hair nice?' he said. David turned and looked at it, 'I've seen lots of girls with hair like

that,' he said; but he sighed and scratched his left ankle with his right foot. Blair, smiling to himself, put out a hesitating finger and touched a shimmering curl; upon which Elizabeth ducked and laughed, and dancing over to the old tin pan of a piano pounded out 'Shoo fly' with one finger. Blair, watching the lovely color in her cheek, said in honest delight, 'When your face gets red like that you are awfully good looking, Elizabeth.'

" 'Good looking'; that was a new idea to the four friends. Nannie gaped; Elizabeth giggled; David 'got red' on his own account and muttered under his breath. But into Blair's face had come, suddenly, a new expression; his eyes smiled vaguely; he came sidling over to Elizabeth and stood beside her, sighing deeply: 'Elizabeth, you are an awful nice girl.' Elizabeth shrieked with laughter, 'Listen to Blair, he's spoony!'

"Instantly Blair was angry; 'spooniness' vanished in a flash; he did not speak for fully five minutes." They presently started home, "but," says Mrs. Deland, with keen insight into the nature of youth, "childhood for all of them ended that afternoon." (1)

As Bourne says: "Youth expresses itself by falling in love. Whether it be art, a girl, socialism, religion, the sentiment is the same; the youth is swept away by a flood of love. He has learned to value, and how superlative and magnificent are his values!

**The youth
falls in love**

The little child hardly seems to love; indeed his indifference to grown people, even to his own parents, is often amazing. He has the simple affection of a young animal, but how different his cool regard from the passionate flame of youth! Love is youth's virtue, and it is wide as well as deep. There is no tragic antithesis between a youth's devotion to a cause and his love for a girl. They are not mutually exclusive, as romanticists often love to think, but beautifully compatible. They tend to fuse and they stimulate and ennoble each other. The first love of youth for anything is pure and ethereal and disinterested. It is only when thwarted that love turns sensual, only when mocked that enthusiasm becomes fanatical and mercenary. Worldly opinion seems to care much more for personal love than for the love of ideals. It gives suffrage and approval to the love of a youth for a girl, but it mocks and discredits the enthusiast. It just grudgingly permits the artist to live, but it piles almost insurmountable obstacles in the path of the young radical. The course of true love may never run smooth, but what of the course of true idealism?" (2)

This passage, though from a prose poet rather than a scientist, is full of deep insight into the psychology of youth, and it is worth studying. The sex impulse is the hidden spring, the underlying motive of much, if not all, of the interesting and worth-while de-

velopment of this period, and a happy transition to adult life depends almost altogether on how this impulse is utilized. As Jane Addams well says: "The early manifestations of this impulse are for the most part vague and formless, and are absolutely without definition to the youth himself. Some months and years elapse before the individual mate is selected and determined upon, and during the time when the differentiation is not complete—and it often is not—there is a great deal of groping and waste. This period of groping is complicated by the fact that the youth's power for appreciating is far ahead of his ability for expression. 'The inner traffic fairly obstructs the outer current,' and it is nothing short of cruelty to overstimulate his senses as does the modern city." (3)

It would seem, then, to be absolutely essential to normal development that the sex impulse, as a definite and conscious factor in the life of the youth, should emerge in some wholesome way from this background of general idealism and vague longing. The interests which may thus develop will be the driving impulses and motives for all the rest of his life. In the season of youth itself this dispersion of the sex impulse furnishes a ballast that will keep the boy and the girl steady on many tumultuous waters. To quote from Miss Addams again: "If the values [associated with sex] are dispensed over the world, the young person suddenly seems to

**Early diffusion
needful**

have discovered a beauty and a significance in many things—he responds to poetry, he becomes a lover of nature, he is filled with religious devotion or with philanthropic zeal. Experience, with young people, easily illustrates the possibility and value of diffusion.” (3)

What a powerful appeal to youth is made by Tennyson's *Maud*! Although sex love is the dominant motive, it is effectively interwoven with many other life-interests and finally it is transformed into high ethical purposes. Such passion easily runs over into the esthetic appreciation of nature:

**Associated with
esthetic appreci-
ation**

“There has fallen a splendid tear
From the passion-flower at the gate,
She is coming, my dove, my dear;
She is coming, my life, my fate;
The red rose cries, ‘She is near, she is near’;
And the white rose weeps, ‘She is late’;
The larkspur listens, ‘I hear, I hear’;
And the lily whispers, ‘I wait.’”

Every boy and girl whose mind has not been too early opened to the meaning of those manifold suggestions of a sex nature which pervade and render unhealthful the average social environment, will at first develop in this general way, especially in the direction of the esthetic appreciation of nature and of a passion for lofty ideals. But modern society, or

**Overstimulation
in modern life**

rather modern commercialism, has, with an almost sardonic insight into the psychology of youth, set a multitude of traps to thwart the normal method of development. The moving-picture shows, even the censored ones, are teeming with suggestions of sex impulse; so also the vaudeville and the popular songs, the dances, the stories, the pictures, whether of genuine art or on flaming bill-boards, all combine to give definite form and content to the sex susceptibility which should at first have been diffused throughout the personality, giving it character and driving power.

The great need of adolescent education, whether in the school or in the home, is just this, of tiding the youth through these critical years, presenting to him abundant opportunities for satisfying his expanding sense of selfhood in wholesome athletics, in oratory, in debate, in art, in literature, in appreciation of natural beauty, in scientific experiment and in various forms of simple social service. "It is neither a short nor an easy undertaking to substitute the love of beauty for mere desire, to place the mind above the senses; but is not this the sum of the immemorial obligation which rests upon the adults of each generation if they would nurture and restrain the youth, and has not the whole history of civilization been but one long effort to substitute psychic impulsion for the driving force of blind appetite?" (3)

We should not, then, conceive these new interests in a narrow sense. The central fact of sexual maturity is, it is true, at the first, the dominant and all-compelling one. For a time it holds the attention of the youth, in one way or another, in its more limited physical aspects. But if his surroundings are normal and hygienic; if his physical development is unretarded and his opportunities for self-expression in a good social environment are what they should be, these basic and, in themselves, animal instincts, broaden out into a host of allied interests. This broadening of the sex impulse has been spoken of as a process of irradiation, or of expansion. The whole tendency of the better phases of modern civilized society is to afford manifold opportunities for a diverse expression of the new life. As the basis of these secondary manifestations it becomes the key, the hidden motive to every conceivable enrichment in the life of later youth and of all the succeeding years of maturity. New appreciations of nature, of poetry, of history and of biography rapidly unfold.

To many a boy, some field of modern science opens up a veritable fairy-land of wonder and opportunity. Others crave adventure and forget all else in its mad quest. The pulse of the explorer and of the buccaneer begins to throb in their veins. Friendship assumes a new meaning. The mind of the youth begins to open up to the characteristics

of strength and of weakness in his more mature associates. He becomes a hero-worshiper; an ardent admirer of the man who can do things; who can lead his fellow men or direct their energies to the working out of some purpose. He is as yet not always able to distinguish worthy from unworthy purposes. His outlook, at first, lacks perspective or a due sense of proportion. He is often quite as ready to admire and imitate the base and selfish manifestation of power as the more enlightened, socialized types. But he is not lacking in appreciation of the deeper ethical and social relations and duties of men.

A vague crude idealism is a part of the life of all early adolescence, an idealism that is often early nipped in the bud or suffers in its development a pitiful miscarriage. But there *is an idealism there to start with* and often it carries the youth over many untoward circumstances and renders him oblivious to many of the sordid influences that play upon him and strive to check his gropings after the larger life which he feels is unfolding before him. Healthful, vigorous outdoor exercises, constructive work of all sorts, opportunities for social service, religious exercises make powerful appeals to him and afford so many fruitful avenues for the expression of this new life that first comes to his consciousness in the impulses associated with sexual maturity.

Every youth is, then, an incipient reformer, a

missionary, impatient with what seem to him the pettiness and the obtuseness of the adult world about him. It is true that many aspects of this adult world are petty and bound down by useless compromise with ideals. The adult world needs the vitalizing energy of each new generation of youths to open its eyes or even to sweep it, if need be, off its feet and knock from under it the props of tradition and of complacency. And yet the world of mature men and women is not quite so blind and halting as the youth often imagines, and as he will discover for himself when he finds his own place within it.

The advice of Wendell Phillips that the young man should identify himself with some great but unpopular cause finds a ready response in the vague longings of the adolescent who is fortunate enough to be living in a community or in a country where some burning social question is agitating the social conscience.

How common it is for boys and girls in their teens to feel that they have been born to fill some great place in life! Take any group of high-school pupils of past sixteen, and what aspirations, nay, even settled convictions as to the high part they are to play in the world may we, who gain their confidence, discover hidden in their inmost hearts. This one aspires to be a poet, that one a novelist, another

a statesman, still another a great musician or an orator. We do not, indeed, mention this to discredit such a spirit of high resolve. Nothing in human life is finer, in a way, than this. The spirit of great men is essentially the spirit of youth with its never-ending enthusiasms, its untiring energy, its daring, its vision. It is not strange that so many of the world's great soldiers, reformers, prophets, poets, musicians, statesmen have been *young* men and women.

When we read the biographies of such people we find them strangely like the boys and girls whom we see every day in our
Youth and genius high schools, and on our streets and farms. The world's renowned seem to have been able to carry to a fuller realization than most of us succeed in doing, the impulses which throb in the breast of almost every live, adolescent boy or girl. These high-school years are years of promise. The pity of it is that later years are not inclined to view the promises of youth with sufficient indulgence. Too few of these fine anticipations of greatness ever get worked out. Not that these children should all normally grow up to be gifted men and women. The plea is rather that they should carry over into their maturity some of the enthusiasm and vision of youth. Even the humblest work that they may take up has a need of being transfused and enriched with the fiery zeal of adolescence.

This is the time when boys and girls are hungry for stirring biography. How many a time does one of our pupils feel, as he reads the story of a great thought or sees that thought worked out into a great deed, "That is just the thing I was trying to say, to do." He finds his own best aspiring self pictured in the life of the statesman, of the reformer, of the missionary, and this glimpse, helping him to know himself better, is an important factor in his own development.

Many a time, of course, the larger vision of life does not have opportunity to develop in normal surroundings. The fine impulse "to be something in the world" may easily run into semi- if not actual criminality. Many investigators have called our attention to the large percentage of crime that comes from the hands of the youth. Fortunately, much of it is not the expression of a really vicious nature, but of the misguided impulse to find adventure, to see life, to do something big and startling. It is not necessary here to enter into the long and pitiful story of adolescent faults and crimes. The preceding sentences give one the point of view from which to understand much of it. Through the list of references given below the reader may find ample illustration of that to which we refer.

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CHAPTER VIII

CHARACTERISTIC PHASES AND DANGERS OF THE NEW SELF

ALTHOUGH it is a truism to say that childhood and youth are formative periods in the life of the individual, there are practical consequences of this principle which are often neglected. It is too often assumed that the process of binding together of traits into the permanent character of maturity may be allowed to take care of itself, except in those cases where actual criminality may appear. But even in those cases the difficulty is not treated with a penetrating insight into the causes, but by means of stupid, rough-handed restraint in a reformatory which often treads ruthlessly on youth-nature, making matters worse rather than better.

The formative period of youth is particularly important, because the traits of character that are then established, and the pattern of personality into which they are woven, are apt to remain permanent. While all stages of life—manhood as

Practical consequences

Character of the later teens often permanent

well as childhood—possess a certain degree of plasticity, far-reaching or fundamental changes in interests, tastes, temperament, purposes and ideals are much less likely to occur after twenty years than they are before.

We can then truly say that the paramount need of the latter half of the teens, the period when many boys and girls are in high school and in the first two college years, is the need of securing a well-balanced set of intellectual, social and moral ideals bound together by dependable habits of expression in every-day life.

The raw materials that must be utilized in this final stage of character building have already been partly described. There is, underneath all the vague unrest, the reaching out after a larger, more complete life. There are the many enthusiasms, the feeling that life has something in store that is unique and even great. There are the many perplexities attendant upon the dawning sense of life's obligations, the conflict of ideals, the seeming strange blindness of middle-aged men and women to needs and to courses of action that, to the youth, seem so obvious that to ignore them seems to be proof only of moral turpitude. The attitude of many a youth is fitly described by Miss Addams as "idealistic impatience with existing conditions." (1)

A typical illustration of the supreme confidence

of the youth himself, in his ability to do single-handed what the world's wisest have somehow failed to reach, is furnished by a boy of forty years ago who went up from the farm to a little denominational college. He had heard that the theory of evolution was being taught in the geology classes. That such teaching should be gaining a foothold in the college seemed to him to point not merely to an unbelieving state of mind in the geology professor, but to a peculiar inability, if not blindness, in those who still adhered to the Bible. It seemed to him that some one should be found who should be able to meet the doctrine of evolution not merely by the plain assertions of Scripture, but who should also be able to take the very facts on which the geologist based his arguments and by more clear-headed reasoning show the utter fallacy of the theory of evolution. That he himself should actually be able to do this which other people had stupidly failed to do was his firm conviction and determination. How strange that people should have been so blind to such an obvious duty; but, on the other hand, what an opportunity it was for him! Surely none but a youth could have formulated such a purpose! It is hardly necessary to add that the good old professor of geology carefully introduced this aspiring boy into a world of facts of which he, before, knew nothing, and his keen mind was soon enlisted as

an ardent champion of the teaching he had imagined it was to be his peculiar mission to overthrow.

The vague unrest, even though unexplained by the adolescent himself, coupled with an ardent impulse to assert himself in the world, to be a person of influence,

A danger and an opportunity

is both the danger and the opportunity of that time. It is astoundingly easy for the youth's life to get set in a narrow channel or to acquire some undesirable form of expression. This is largely, if not entirely, due to his very great susceptibility to every surrounding social influence. "Through this sensitiveness the deadly pressures get their purchase on the soul; it is also the season for the most momentous and potent influences for good. In youth, if there is the possibility that the soul be permanently warped out of shape, there is also the possibility that it may receive the nourishment that enables it to develop its own robust beauty." (2)

Every thoughtful teacher of boys and girls in their teens has noted the tendency above suggested

Adolescent types to develop well marked types, or moods. In a degree these types

are not radical departures from the character the youth has had as a child. They are simply the childhood characters in a further stage of development, but now brought out and more clearly demarcated as types of character, because of the larger and better defined social relations into which the child has

emerged. In some degree also they are the product of the effort of the child to find himself in the larger world. Concretely, what we mean is this: Traits of timidity, sociability, curiosity, truthfulness, secretiveness, frankness, love of beauty, love of outdoor sports, of reading, if prominent in childhood, are quite apt to appear in the youth with such definiteness as to be distinguishing characteristics, simply because he is living now in an environment which tends to throw into strong relief all marked personal traits.

The unrest and the effort at social adjustment will also often tend to throw into the foreground and produce an extreme development of some one childhood trait which was, to start with, in nowise conspicuous. Thus we find it possible to describe many adolescent boys and girls by some one or more dominant characteristics. They are aggressive or retiring, cheerful or morose, very scrupulous or quite unscrupulous, and so on indefinitely. Sometimes the same person belongs at different times to strikingly different types, which then become moods between which he alternates in most unaccountable ways. But each and all of these exaggerated types, or moods, are incidents in the development of the man and the woman. They are of great significance to parent and teacher because of the danger that the youthful character may so definitely set in some one of these molds, even though it be a good one, as to interfere

with the proper rounding out into mature life. The greatest danger, however, lies in the possibility of undesirable dispositions becoming fixed and permanent for life. It is safe to say that whatever characteristics are allowed to assert themselves in this period are very apt to remain permanent. A boy who habitually permits himself to be morose, untruthful, insincere, unsociable, sensual or ill-tempered up to the time he is twenty, will have great difficulty making himself over into anything else. It is a crucial time when, as quoted above, the "soul may be permanently warped out of shape."

This view is contrary to much popular superstition regarding this period of life. These moods and dispositions are often looked upon as mere passing incidents of growth, which will later be sloughed off and a new character appear; the boy is permitted to sow his wild oats, the girl to be ill-tempered and malicious in her treatment of others. The parent or teacher is apt to feel that his responsibility for training ceases when the child arrives at youth. All too readily he is surrendered to his own devices. "Just at the time when he becomes really sensitive for the first time to spiritual influences, he is deprived of this closest and warmest influence of the home." Instead of being "brought into a haven," he has been "launched into a heaving and troubled sea." "This is the time when his character lies at stake,

and the possibility of his being a radical, individual force in the world hangs in the balance." (2)

It matters, then, tremendously for the youth's future what habits of action and thought he now drifts into or consciously adopts.

An excellent illustration may be given of a young girl, a leader among those of her age, attractive in many ways, and clever. She was careless, however, of her words; she was often insincere, untruthful and malicious. Now, as a grown woman, the dominant traits of her maturity are those of her late girlhood. *She did not outgrow them*; on the contrary they fastened themselves upon her. She has few real friends—everybody is afraid of her biting tongue, no one trusts her to carry out a promise or do a single thing from pure personal disinterestedness.

There is a definite and practical significance in these facts for those who have anything to do with the guidance of adolescents. First of all is the tendency of some one mood or trait of child-character to emerge and assume, in youth, a dominant rôle. This, as we have pointed out, is largely the resultant of the way the youth responds to the many social stimuli which, for the first time, he keenly feels. The effort to find himself, to assert himself in this larger circle of activities, or to maintain himself against the dominating personalities of others, causes him to adopt a more or less characteristic attitude or

disposition. This disposition may be quite wholesome or it may be highly undesirable for his own well-being and that of others.

The second practical point is to produce in the youth a thoughtful attitude toward these changes, in order that his own help may be enlisted in rounding him out into efficient manhood. If unpleasant or harmful dispositions emerge, he must find in his adult associates sympathy and help rather than condemnation. Although he may not be wholly responsible for the attitudes and moods that develop now, he must be led to see that he is largely responsible for their continuance. He must feel that now more than ever before *he can take a direct hand in his own development*. His own intense self-consciousness and eagerness *to be somebody*, to realize ideals, is the natural soil in which to plant the seeds of self-control. He can learn to interpret his moods as passing phases which are not to be allowed to fix themselves on him unless they have real worth for meeting life's problems. He can learn to see that he will have no finer test for his courage and his ability than to face and overcome dispositions which will interfere with his struggle for those fine ideals which now grip him with such force. Even the "bad boy" has his wholesome adolescent ideals. His badness consists, not so much in his purposes, as in his failure to get himself properly lined up to fight for them effectively. In facing untoward circumstances "the youth usually plays the stoic.

He feels a savage pride in the thought that circumstances can never rob him of his integrity, or bring his best self to be dependent on mere change of fortune." (2)

This courage to face the world, however harsh its aspect may be, is the courage he must learn to bring into play as he faces himself. The mechanics, so to speak, of self-management he can appreciate now as the little boy could not. Through conversations with older people who understand the peculiar problems of this age, through the study of the lives of men who have been truly efficient in meeting the needs of their times, through association with teachers and other adults who have plenty of wholesome interests in the work of the world, he should gain the idea that self-control has two sides; it consists, not alone in checking bad impulses, but in actively cultivating those attitudes which he can now see have such an important bearing on his future success.

The value of the sympathetic friendship of older people, especially teachers, is well illustrated in the following chapter, "The High-School Period in Retrospect."

Friendships among young people themselves are also full of significance. What a recent writer and keen observer of youth says of the girl is also very largely true of the boy. She writes:

"The social side of the girl reveals itself not

only in the desire to have a good time, but in the
 An illustration deep and ardent friendships
 formed during the teen period.

While she enjoys to the full the society of the group, the girl in her teens invariably has a 'dearest friend,' who shares her joys and sorrows and confidences. This tendency becomes especially evident at sixteen," and later.

"These friendships may be the source of greatest blessings or may mean the lowering of the whole tone of her moral life. Both mother and teacher need to observe carefully the formation of friendships and be sure to encourage only the helpful ones. Public school teachers of experience can all testify to the rapid changes in girls which so often follow the development of a deep friendship.

"I remember a girl of sixteen, dreamy, imaginative, and so much interested in her boy companions that lessons, home interests, and everything else were sacrificed. What to do with her and what interests to substitute were questions that both mother and teacher failed to solve. At a most opportune time a 'new girl' moved into the neighborhood and entered school. She was practical, attractive, a good scholar, greatly interested in outdoor athletics." A friendship sprang up between the two girls. "Soon the dreamy sixteen-year-old was playing tennis on summer afternoons, and reading aloud in the hammock afterward to rest. When winter came she suddenly decided that school

and study were worth while, brought up all her averages and made up her mind to try for college. Skating and the gymnasium made her a new girl. And all this transformation, fortunately for her good, came naturally and very rapidly through the influence of her companion. It comes almost as quickly in the other direction. Nothing can be more helpful to the shy, timid, self-conscious girl than the companionship of one who will encourage her and help her to take her place with others in the social life of which she is a part." (3)

The preceding pages should give the reader a proper background for the consideration of the

A supreme opportunity for moral training

moral education problem in high school. These years, with their development of a new selfhood, with their impulse for life and action, with their appreciations of friendship and their susceptibility to social influences and, withal, their devotion to "causes" and their impulse to serve, are surely the years above all others for moral training.

May we be allowed to quote Miss Addams again? These words of hers set the matter in the light in which we believe it should always be approached in the high school.

"It would seem a golden opportunity for those to whom is committed the task of spiritual instruction, for to preach and seek justice in human affairs is one of the oldest obligations of religion

and morality. All that would be necessary would be to attach this teaching to the contemporary world in such wise that the eager youth might feel a tug upon his faculties, and a sense of participation in the moral life about him. . . .

"Each generation of moralists and educators find themselves facing an inevitable dilemma; first, to keep the young committed to their charge 'unspotted from the world,' and, second, to connect the young with the ruthless and materialistic world all about them in such wise that they may make it the arena for their spiritual endeavor. It is fortunate for those teachers that some time during 'The Golden Age' the most prosaic youth is seized by a new interest in remote and universal ends, and that if but given a clue by which he may connect his lofty aims with his daily being, he himself will drag the very heavens into the most sordid tenement. The perpetual difficulty consists in finding the clue for him and placing it in his hands, for if the teaching is too detached from life, it does not result in any psychic impulsion at all." (1)

The opportunity of these years for wise moral training is as yet largely neglected. What is needed is something more than mere "incidental instruction" or "whole-some school atmosphere." The youth needs to be led to *think* about questions of conduct. In fact, he *does* think about them, but unless his thinking is

guided it will often go astray. The purpose of explicit moral training in the high school should be to cultivate a sound moral thoughtfulness about the various concrete situations which present themselves to modern high-school boys and girls. People conversant with the morals of the high school tell us they are pitched on a most discouragingly low plane. Theft, dishonesty in connection with studies and athletics, and still worse forms of social and personal immorality prevail to an alarming degree. (4) Is it because the adolescent is by nature immoral? This can hardly be, for such a conclusion would run counter to all our previous discussion, and is disproved by the high standards of conduct maintained by boys in English secondary schools. No, the fault is largely due to neglect on the part of the school to give the training needed, a training which we believe the boys and girls in their teens are quite ready to receive.

This is not the place to discuss suitable methods of moral training. We can only refer the reader to one of the admirable schemes **A suggestive method** which is now being worked out and applied in a few of our schools. It is carefully adjusted to the interests and general point of view of the teens and, if faithfully followed, would, we believe, do much toward filling the present serious gap in the training of the adolescent in the American high school. We refer to the course of

moral instruction developed by Sharp and Neumann, and published in outline in a recent number of *Religious Education*. (5)

High-school life is replete not only with opportunities for direct and wholesome moral instruction, but also with opportunities for experience in right living in the broadest sense of that term, and this latter phase is quite as important as the preceding. Every high school which seeks the best for its youths must aim to develop all sorts of opportunities for social morality within and without the school. Many high schools have shown that it is possible for their pupils to participate in various forms of social service to the community. Such opportunities are, if rightly presented, usually embraced by the pupils, young reformers and missionaries as they are, with an eagerness that is almost disconcerting.

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✓ Swett, H. P., *The High-School Pupil*, *Education*, 31:224.

CHAPTER IX

THE HIGH-SCHOOL PERIOD IN RETROSPECT

FROM time to time the writer of these pages has collected from his students reminiscences of their high-school experiences. These students were asked to describe any incidents or phases of their high-school life which they felt might be worth their remembering when they themselves entered such schools as teachers. It was suggested to them that these reminiscences might be of any sort, such as their own personal attitudes, interests and aims, distinctive mental or emotional traits, their relations to their studies, their teachers, and any aspects of the general social life of the school which, in looking back, seemed significant as pointing out either what they themselves should do or avoid doing as high-school teachers.

It should surely be of some value to teachers to know what sort of lasting impressions their pupils carry away with them into later years. A record of such impressions, even though it be naive, should throw some light on the human nature of real high-school boys

and girls. Any attempt to paint a general picture of the mental life of the teens is apt to exaggerate the high lights. If there is any possibility that the preceding pages have described extreme and unusual types the accounts which follow will furnish a certain corrective; will picture what some have liked to call the "real high-school student."

The objection that these records are from a selected group of high-school students, those who have gone to college, and who are, therefore, not fairly representative, is not well-founded. The only way in which these students are probably different from the larger class who have not continued in school is in their possibly greater ability to give a better introspective account of the experiences of the years just past than those who have not had the further training in scholastic work.

The experiences of high-school life mentioned by these students are probably, then, quite characteristic of all high-school pupils; the difficulties, in fact, would be quite as keenly felt, if not more so, by those who failed to overcome them and continue their work in higher schools. Indeed the student who has successfully completed his high-school course and has gone on to college would be less likely to emphasize the difficulties of the high school than those who had spent only a year or more in school or who stopped with the completion of the four-year course.

These are essentially human documents. It would be futile to try to summarize them and to state percentages, and yet the quotations show with entire fairness the attitudes of these students toward their high-school life. The first impression one gets in reading them is the wide range of individuality represented by their writers. There is every variety from the phlegmatic, unemotional student who *can think of nothing in particular*, to the intense emotional type, whose high-school life was richly colored by "experiences which he will never forget." This very diversity of types is in itself a significant fact for the teachers of boys and girls in their teens to bear constantly in mind.

To many a pupil, the high school opens as a new world of mysterious possibilities. This attitude of eager anticipation is well expressed by one student, who says:

High school a new world to some pupils "I can still feel the thrill of expectancy with which, for example, I entered upon the study of Latin. The teacher was the guide. She knew Latin land, and we were eager to follow her through that delightful country. My English work was not a gray monotony of themes. It was colored with the purple of imagination."

"It was the greatest event of my life when I entered the academy as a freshman."

And yet the transition is often affected with difficulty. Another says: "It was with a great

Difficulties of entering deal of pleasure that I looked forward to my entrance into the high school. Why I was going I never seriously considered; I just took it for granted, as did my parents, that I should go through. But my real entrance was far different from what I had pictured it to be in my mind. In the grades, there had always been a congenial, home-like atmosphere which completely dominated everything; but in the high school I came face to face with an absolutely different environment, and many a time during my first year's work I wished I were back in that 'dear' old grammar school which I had learned to love and to respect."

Another writes: "After having been the important 'A' class of the last grade in grammar school it seemed strange to find ourselves submerged in a larger group in high school. One especial difficulty was the getting accustomed to having different teachers for every subject, the getting acquainted with the teachers and the fear that they might not like us.

"I looked upon everything at that time as being *big*. The teachers seemed to me as being very **First impression of teachers** noted and knowing very much, and for these reasons I stood in awe of them. Then, I felt there was not that close relationship between pupil and teacher as there had been in the lower grades. If the teachers were not always kind and patient with me, I grew to dislike

them. Sometimes I thought the teachers were not very religious, because they scolded when I thought they ought to be kind and helpful.

"But when I came to my sophomore year, I looked upon things differently and partly overcame this feeling of awe and timidity. I had more confidence in myself and no longer felt that my high-school mates were any bigger than myself. Moreover I realized that the instructors were not so distant after all, for on several occasions both in lessons and programs were we thrown together, and each time the instructors put forth great effort to show their personal interest in us."

"The individual was a minus quantity; he was completely submerged. The personal touch between teachers and pupils to which I referred lasted only during the first year, and then it completely vanished. The methods of instruction were, with one exception, purely mechanical, and the teachers never attempted to make the work really practical. Interest in school, in life, in activities, in everything was far below par and nothing was ever done to stimulate the individual."

"In spite of the difficulty of adjustment when entering the high school, I felt a renewed interest in school work. The increased field of work, together with the less close supervision, made me feel more independence, more responsibility, in regard to that work. This may have been due to the attitude of my first high-school teachers, which was

one of sympathy and of interest in the individual rather than the subject."

Another says: "One thing which stands out uppermost in my mind was the lack of interest on the part of the teachers in helping the pupil in selecting his course of study."

It is not strange that so many memories of high-school days center around the relation of teacher to

**Susceptibility
to teacher's
personality**

pupil. Such comments as these which follow are full of suggestion. Probably at no time of

life is a person more subject to the stimulating or depressing influence of other personalities than in high school. No one can read these paragraphs without feeling that the question of efficiency in the high school is intimately bound up with the personality of the teacher.

"The commercial teacher was a very small man, but we were afraid of him. Everything was silent the minute he came into the room. He was interested in his work and was not satisfied if we were not doing excellent work. We had to do it well and we worked hard for him. In my sophomore year there was a change in instructors. The commercial teacher was a joke, he was a bluffer, but he didn't seem to know that we knew it. Another professor was very indifferent to his work and so were we. He was impatient and cross. It really seemed that he was simply teaching for the money there was in it."

"It seems to me, as I recall my freshman and sophomore years in high school, that this is the period when violent likes or dislikes are taken to instructors. I remember one teacher whom I dearly loved, and I was so afraid that she did not like me."

"I always did my best work for the teacher who *made* me do my work, for the teacher that I was afraid of. I would study hours for some instructors rather than be criticized or scolded.

"I was fond of our superintendent. He seemed to *understand* us; would talk us out of things; The "understand- would not scold unless we needed ing teacher" it. He was sympathetic and interested in every one. On the other hand, a lady instructor was always scolding; was cross and unreasonable. We got so we would laugh at anything she said. She treated us just like primary children. She was not attractive and had very poor taste. She wore a bright red tailored suit with a light blue hat. She also had a knitted scarf of all the colors of the rainbow. We called her 'Old Glory' whenever she wore the red and blue combination."

"It was always the kind and sympathetic teachers for whom I would try and work the hardest and in whose classes I did the best work. More can always be accomplished by teachers of this sort than by the ones who seem to take no interest in the pupil."

"As I have mentioned before, there was a certain high-school teacher whom I respected and looked up to as a model of perfection. She made me unconsciously take a greater interest in my work and helped me build up ideals which I still retain."

"The influence of some of these teachers will have a lasting effect upon my life, and I am sure there are many others who will say the same. I well remember the little woman who, for three years, occupied the principal's chair. Small in stature but mighty in moral principle. It was she who set the standard for right doing and good class work, and refused to give approbation for those who remained below it."

"He was severe in his requirements, but always just and always courteous—he treated us like young men and young women. I would go out of my way many blocks just in order to meet him and hear him say, 'How do you do, Miss ——.' I treasured in my heart for a long time his last words to me: 'I'm sure I do not see how you could have done better than you have; I shall expect to hear great things of you.' I finished my course in a district school almost without regret at the change, because he and another favorite teacher were not coming back the next year."

"During my freshman and sophomore years I liked all my teachers and was in love with two of the young lady teachers, just out of college. We used to show our devotion by bringing them

flowers, fruits and various presents and hanging around their rooms to talk with them. In my junior and senior years I did not like my teachers as well. I got to thinking that one of them had taken a dislike to me and there seemed to be a lack of understanding between us."

"It is interesting, also, to note the opinions we entertained of the various teachers. We did not stop then to consider why we liked some and disliked others, but our feelings were strong in some cases and, of course, affected our work. One science teacher spoiled his influence with his second year pupils by treating them as 'grown-ups.' He started out by addressing them as 'Miss' and 'Mr.' He seldom knew our names outside the class room. His whole attitude was distant. At the same time there was a mathematics teacher who treated us as small children.

"The next superintendent, however, appealed to us differently. He seemed made of the same material as we were, and met all of his pupils on an equal basis. The rich and the poor were alike with him. I remember when I enrolled under him, I wanted to take some subjects over, as I felt I had not done as well in them as I should. After looking up my record, he turned to me and advised me not to do so, saying that he thought I could handle the advanced work without difficulty. That, I think, determined my career, for had I been allowed to take those subjects over, I should never have

finished the high school. But through his advice I felt encouraged, and he awakened a feeling in me that I could accomplish what I wanted to, provided I tried. I had many other teachers, some of them teaching me more by their actions than they did by their words."

"How we disliked him, feared him, disrespected him! Then there was another who seemed to give all her thoughts to dress. We always admired her clothes, yet felt that they were out of place in the schoolroom. She did not mix with the common teachers or pupils, and it was not long before we classified her as a snob. . . .

"But the pupils as well as the teachers had traits of both kinds. The majority of us could have been trusted anywhere, but the teachers always made us feel that they were watching us, and that we were not a part of the governing body. I think perhaps this was the weakest point in our school. We whispered and played tricks whenever we could, and felt as if it were all right, if we were not caught in the act. This, it seems to me, would have been different had we realized that all the discipline did not rest with the instructors."

"My conduct in high school seemed to be greatly influenced by the teacher who happened at the moment to be in charge. One teacher was an object of particular dislike. She was extremely disagreeable and impatient and in all of our tests, watched

**Influence of
teachers on pu-
pils' conduct**

us with cat-like care in an effort to detect cheating. Our chief aim was to outwit her and we never thought of the dishonor involved in cheating, but merely felt delight in the fact that we had escaped the detection of the despised instructor. In direct contrast to her, was a teacher who acted as though the possibility of our being dishonest had never occurred to him and I remember but one person who was ever dishonest in his classes."

"I didn't like the teachers because they were such important beings. These teachers were from the best families of the city and were merely teaching for want of something better to do until they were married. They would not speak to me, an insignificant, poor country boy, except in the class room and then I was so scared that many a time I could say nothing and consequently got a zero for that day's work. There was a vacancy in the teaching force after my freshman year and a poor, but beautiful young woman was called to fill this vacancy. She was the idol of my heart because she treated us all alike and would talk to and advise me about anything I wanted advice about. Many an evening have I stayed to see if I could help her. There was no wall between her and her pupils. I would do anything for her. From this time on, I liked to go to school."

"The discipline stood out strongly in that school. The superintendent was one of those born overseers. His only rule was 'do right,' but this was

sufficient for him, for his very gait and expression demanded obedience and through it all he ever had the good will and highest respect and esteem of his pupils. I always felt a strong liking for all of my instructors while in high school. I had but one teacher that I did not care for and really disliked. She was one of those persons who never smiled; who never saw a funny side to anything. I never knew that teacher to laugh heartily with the class. To be sure the recitation is not to be converted into a laughing bee, but I believe there are times when a good laugh will do more good than anything else."

"The teacher who appealed most strongly to me was a quiet, unassuming woman who always entered the schoolroom with a happy smile and a cheery 'Good morning.' She seemed glad to be there and glad to see the children. She was quiet and calm in all her movements; her voice was low and pleasant and the pupils learned to be quiet and attentive when she spoke. In all her commands she was kind yet determined. In this way she soon won the respect and love of all her pupils. She would go to almost any amount of trouble to help a child out of a difficulty. Her explanations were clear and concise. She knew how to make herself understood. More than all, she was absolutely impartial, and this contributed much toward making her a real friend and companion of each child.

"A teacher who did not appeal to me was an irritable, quick-tempered woman. She moved nervously about the room and had a loud shrill voice. She could be heard distinctly some distance from the room. In her presence the children moved about carelessly and noisily; their voices were often loud and harsh. She seldom smiled and never, I think, greeted the children as they came in the morning. She acted as if she were troubled and irritated by the children. She was continually nagging them and often punished them for slight offenses. She was very partial to some of her pupils and ignored others who were not especially forward in their manner. She never troubled herself to help a pupil over a hard point. He must either get the help of an older pupil or go on with his difficulty unsolved."

"My best teacher was always fair and just, both in regard to our work in class and our conduct in assembly room. She was kind when we tried and made mistakes and never discouraged us by sarcasm (a fault very common to teachers, I think); she was always tastefully dressed both in school and for outside affairs. All of these characteristics along with her ever-readiness to help and encourage in everything that concerned us made her a sort of model for all of us. We used to say, 'When I grow up, I am going to be just like Miss L.'"

"The high-school teacher who stands out most prominently in my mind is not the one who taught

with the greatest success nor the one who seemed to have the best education; but rather the one who gave us all she had of sympathy and interest. Her subject was English, but she taught us more of humanity than of language forms. There was a depth and breadth about her that went far toward giving the boys an interest in school life."

"The teacher who appealed to me most was very thorough in her work. She had a quiet and pleasing way about her. She was firm in discipline and respected by all the pupils, but at the same time her bearing was not unduly forward. Her attitude toward her class was very cordial and sympathetic and it brought forth the very best efforts from the pupils. She had a remarkably even temper and very seldom seemed irritated or cross. Outside of the schoolroom she was able to come down to the level of the pupils and become one of them without their taking any advantage of her. She was jolly and sympathetic and took a personal interest in all of us and, above all, she was a woman of high ideals."

"The teacher of my high-school days who appealed to me most was the principal, under whom I worked the entire four years. The quality that impressed me most was his ability to maintain discipline. The school was not an easy one to handle and yet he always had good order, not merely in his own classes but throughout the whole school. To maintain such order he did not rely on a system

of petty and irritating rules and precepts, but allowed to the pupils every advantage and liberty possible.

"This principal also impressed me with his power as a teacher. He taught me history and mathematics and in such a way that I still take a great interest in both subjects. He understood his work and left a clear and definite idea of what he taught in the pupils' minds."

The reader will remember that the above paragraphs are furnished by students who have been out of high school three or four years. It will be interesting to compare these estimates of teachers with some made by pupils who are yet in high school. About four hundred pupils in a single city high school were recently asked by their English teachers to write brief descriptions of their ideal of a high-school teacher. From such quotations as follow, and they are entirely typical, it is quite clear that pupils are interested in their teachers while they are working under them, that the analyses of effective teachers, given on the preceding pages, are not afterthoughts of more mature years but are quite genuine presentations of views held by pupils actually in high school.

"I have just had a teacher who is, I believe, the best that can be found anywhere. When outside of school she did not act as if she were far above the pupils, but mingled with them as if she were

one of them. I think it was on account of this that she had such good control over her pupils. In her study periods she very seldom spoke a word and yet things were so quiet that you could hear a pin drop, while the teacher in charge just before her would walk up and down the room or shout at us and just the minute his back was turned, *bang!* would go an eraser against the wall. In all my two years' work under her, I never once saw her lose her temper. If she asked a pupil a question and he did not answer rightly, she did not 'snap' him off quickly and call on some one else but talked to him and tried to find out on what grounds he based his answer." (Boy)

"A successful high-school teacher must have a thorough knowledge of his subject and a genuine understanding of his pupils. Of course the character and personal appearance of the teacher have much to do with his effectiveness. He should be good-natured, patient and earnest in his attitude before his class. His efforts will be materially aided by a well-kept personal appearance and by a pleasant and cheerful countenance. He must, in addition to the good qualities common to most people, possess good morals and good habits and finally he must have peculiar skill in presenting his subject in an interesting way before his classes." (Boy)

"My ideal high-school teacher is one who treats all the pupils alike; who explains clearly all that is not understood by the class. If a student comes

to class without his lesson, he should be kind and yet stern without getting angry. The pupil will then try harder next time." (Boy)

"My ideal teacher is a young lady of very cheerful disposition and quite nice looking. She is strict and yet not cross, and does not always wear a frown or look as though she were mourning over somebody. If a pupil makes a mistake, she will not 'bawl him out' like most teachers, but will tell him after class he will have to study harder. She is not the least bit sarcastic, and has a very good sense of humor. If something funny happens to be said, she will laugh. None of her children will ever accuse her of being partial or of having favorites." (Boy)

"An ideal high-school teacher should have a natural aptitude for making the pupils understand the subject taught and she should not talk over their heads. Nor should she do all the talking. The pupils should like to come to her room. She should be firm as well as pleasant and should expect the pupils to do what they are told to do. She should not lose her temper, for by doing so she loses the respect of the pupils. When she reproves a pupil, she should be sure she is reproving the right person for the right thing."

"The ideal teachers, as a usual thing, are not very plentiful, for teachers are not made to order. If it were only possible to have one who disbelieved in sarcasm and who would encourage instead of dis-

courage the students! The average boy or girl is afraid of a teacher who corrects every slightest mistake with a sarcastic remark. If such a teacher only knew how little good this does and the kind of a reputation she is making for herself, she would try a new method." (Boy)

"Some teachers, when they call upon you, act as though they were daring you to make a mistake, and glare at you until you forget the answer, even if you knew it at first. Other teachers look at you as though they expected you to recite. This makes you feel like attempting it." (Girl)

"No teacher should show partiality toward any pupil." (Girl)

"My ideal of a high-school teacher is one whose very soul is in her work and yet who does not appear all-absorbed by her teaching; a teacher who comes to the class room free from that overbearing manner sometimes assumed *ex officio*; a teacher who laughs and laughs as though she means it." (Girl)

"Perhaps I demand too much of my ideal, but I have already known several teachers who have very nearly come up to it. I have especially in mind my language teacher; she is of the patient jolly type whom everybody likes. She is never cross, although the 'shirks' learn to fear the time when they answer, 'I don't know.' Some of the most uncomfortable moments of my life have been spent after I have 'flunked' in her class, my guilty

conscience aroused by her gentle rebuke. In general, I like her because of her patience, her ready sense of humor and her continual holding up of an authority to which we are willing to submit." (Girl)

"I think a teacher should be patient and answer questions asked by students in a pleasant way, instead of saying, 'Well! if you can't see an easy thing like that, I won't tell you.'" (Girl)

"Probably the position of high-school teachers is a trying one and the pupils may misunderstand them at times when they are very tired or have had a difficult time with some one who does not seem to care to learn."

The various characteristics of a good teacher which are mentioned by these pupils were summarized as follows:

Characteristics as a teacher	Number mentioning	
	Boys	Girls
Well-educated	38	26
Experienced	13	7
Prepared on lessons.....	21	16
Progressive	11	3
Ability to teach.....	56	58
Ability to explain.....		
Good leadership	15	21
Not too strict, especially before and after class.	21	26
Strict	32	48
Fair in marking	24	38
Calls upon all pupils.....	11	10
Gives pupils time to recite.....	3	9
Makes lessons interesting.....	20	46
Just	25	18
Impartial	42	76
Does not "bawl pupils out".....	11	14
Puts pupils on honor.....	3	6
Not too many examinations.....	7	4
Short or reasonable assignments.....	10	10

Characteristics as a teacher	Number mentioning	
	Boys	Girls
The teacher's attitude toward the pupils		
Kind, courteous	36	39
Helpful, especially to slow pupils		
Boys 26, Girls 35	37	50
Encourages the failing.....Boys 11, Girls 15		
Sympathetic and "understanding"		
Boys 19, Girls 32	45	78
Takes an interest in pupils..Boys 12, Girls 20		
Friendly with pupils outside of class		
Boys 11, Girls 23		
Patient	Boys 3, Girls 3	
Personal qualities of the good teacher		
Physically well	8	2
Dignified	10	14
Well-poised, not easily excited.....	21	27
Dressed neatly and becomingly.....	13	27
Enjoys fun	39	93
Pleasant in class.....Boys 19, Girls 32		
Boys 20, Girls 61		
Refined	5	4
Sincere	9	4
Pretty	6	5
Young	17	7
The teacher's lot a trying one.....	3	9

It is evident that high-school pupils have some pretty definite ideals as to what their teachers should be like. They clearly appreciate many of the fine points of the good teacher, possibly far more than their teachers give them credit for doing. It should be an inspiration to the earnest teacher to know how highly certain qualities are regarded, such as kindly sympathy, appreciation of the pupil's point of view, "square dealing," ability to teach and to make points clear, sense of humor and so forth. One has a feeling in reading such papers that in many cases the ideal quality is present in the pupil's mind only by

suggestion from the opposite quality which he sees most frequently in actual school life. This is especially the case when it comes to mentioning "sense of humor" as one of the characteristics of the successful teacher.

Both the reminiscences and the words quoted from present high-school pupils confirm statements made in earlier chapters as to the extreme sensitiveness of adolescents to the influence of older people about them. They respond to those who show a personal interest in them, provided this interest is shown in a dignified and genuine fashion. They dislike teachers who hold aloof, teachers with mannerisms, teachers who assume attitudes, and who lack poise and patience.

These are only a few of the comments that are suggested by this material. Every teacher or prospective teacher will find here many suggestions for better adapting himself to the needs of these sensitive and idealistic years.

That the high-school years are an important transition period almost all these students admit, although with some the changes were so gradual that they were quite unnoticed. Thus: "My high-school years were not marked by any 'storm and stress,' but by a pleasant, profitable, gradual growth."

"I had no sudden changes in emotional, in intellectual or social attitudes and my hopes and aspirations were those of the ordinary girl."

"I can not recall any changes of attitude which took place during my high-school career. I had a moderate interest in social affairs, for I enjoyed dancing and going to parties, but I was also extremely fond of my home."

"The childish desires were put aside and I was compelled to think and act as a woman. The dolls were banished along with the other playthings, and, worst of all, the younger playmates. Under these circumstances there was a decided change in my temperament. As a little girl I was happy and care-free and had a sunny disposition (if such a term is permissible), always looking on the bright side of things.

"The 'New Life,' as Daniels terms this transition period, brought care, responsibility and unhappiness to me. I became morbid and felt that no one quite understood me. Then came the idea of the dual personality. After seeing *Doctor Jekyll and Mr. Hyde* on the stage, I decided the easiest way to get along in the world would be to let the people who insisted on misunderstanding my ideas and actions do so and I would keep 'the other self' to myself. The result was almost disastrous to my friendships. To all appearances I was cold and indifferent to other people and their affairs and became very self-centered. My mother and I grew farther and farther apart as I confided less in her. If I was misjudged, I would let such judgment

stand and inwardly played the part of a martyr. However, I had very high, unattainable ideals. My ambition was to be very kind to other people, a philanthropic sort of an individual always doing things in a quiet, unassuming way. These ideals were aided by one of my high-school teachers. I was decidedly introspective, I had a firm belief that no one had as serious thoughts as I concerning the problem of life. . . . After this emotional experience I became more morbid than ever and more serious too. Eliot's description of Maggie Tulliver more nearly expresses my feelings than anything that I have seen written. 'There was a hopeless yearning for that something, whatever it might be, that was the greatest and best on earth.'

"I had my serious thoughts in regard to the future. Much time was spent in day-dreams. I realized that there was a lack of adjustment somewhere and I longed for the time to come when I should be righted. Within the last year I have gradually acquired my childish attitude, which was optimistic. I can not explain how or why for sure, but I believe that it is in part the result of two friendships, one that of a woman, the other of a man.

"I think now that my experiences in the adolescent period are similar to those of others, while at the time I was experiencing them, I was very certain no one else had ever felt so. I do believe, though,

that I was forced to take a 'grown-up' attitude toward life when a mere child and that, in part, caused the morbidness and too serious thinking."

"I became more particular in my dress and sensitive in the manner people spoke to and of me. When in the ninth and tenth grades I would do mostly anything the teacher asked me to do without questioning and saying anything about it; but later I became more independent."

"It was in my sophomore year that I first began to form any ideals and to plan for the future. I

Ideals had always liked Latin and this year I had an excellent Latin teacher. I had always intended to go to Iowa, but up to this time it was merely a matter of saying 'Yes, I am going to college.' But now I began to look at things differently. My greatest ambition was to major in Latin and become a teacher like Miss K."

"I indulged in day-dreams quite as much as any one that our authors have described. I idealized

Dreams of greatness myself, my friends, my surroundings, and made them over to suit my fancy. My favorite theme for day-dreaming was to picture myself a star in public performances, when as a matter of fact the rôle was entirely out of my line of accomplishments. It was during my sophomore year that my attitude toward boys changed in a marked way. I became shy and restrained in the company of the neighbor boy with

whom I had grown up. He turned into a 'Prince Charming' before my very eyes. I imagined myself in love with him. I passed through a period of religious and spiritual budding-out, too, I am sure. In the grades I never knew why I went to Sunday school, and I never went to church at all then. But in the second year of the high school I began to think seriously about the welfare of my soul. I read the Bible through from cover to cover, not because it interested me immensely, but because I thought it was the thing to do."

"I developed a different attitude toward boys because of this new association with them. Previously I had played with them as with my girl friends and had looked upon them in the same light. Now, I endeavored to look my best in their company and I also felt a certain constraint around them and became more careful of my conduct. In various boys at various times, I felt a distinct interest, but I do not think that there was an element of affection in my attitude."

New attitude toward the other sex "My girl friends interested me most, and although I did not have many, those I did have were very intimate, and we enjoyed being with each other more than anything else."

"In my junior year we had a great many class parties and I first began to take an interest in boys. Before this I had not cared to be with them and thought that they always spoiled things."

"I much preferred boys for playmates; girls with their dolls and playhouses seemed altogether too poky for me. My first month in high school brought about a sudden change in me. I began to feel a sort of embarrassment around my old playmates and took great pains with my personal appearance; most of all with my hair which hitherto had been an unknown care to me. My boisterous habits of the previous summer 'grated on my nerves,' as it were, and I strove earnestly to replace them with the refined and pleasant manners of a teacher for whom I cared a great deal. My efforts to be a lady called forth many jeering, teasing remarks from my younger friends who had not yet come to realize 'the heavy burden of life' as I had, and they made much fun of me because I refused to chew gum in school.

"The element of affection for the opposite sex entered into my nature about this time and culminated in my first 'case' some two months long in my high-school course. Under the very careful guidance of my mother this friendship brought out more womanly qualities in me than any other affair in my whole life."

"I liked studies in which I could 'think things out' and could see little value in simply memorizing things. I always did just enough work in the studies that I disliked so that it would not bring down my average grades too much."

The impulse to participate in the larger life outside the school and the attendant uncertainty as to how to adjust one's self to it, is illustrated in many of the papers collected. The following are characteristic statements:

"The last few years in high school were characterized by a marked impatience to be out and earning my own living. I had **Impatience with school restrictions** always planned to teach and had mapped out a very brilliant career. Beginning in the country schools, I should rise by my own personal effort. Occasionally the teaching profession would lose all its interest. In imagination I became at those times a very great singer, a social settlement worker, a nurse or a writer. I felt sure I could be successful in any of these callings, even though I had shown no talent along such lines. At times, I felt myself to be a most misunderstood person. For a year or more I had frequent attacks of the 'blues.' At these times I would cry, for what reason I could not say. I only knew I felt miserable and no one seemed to care."

"As far as having any vocational interests, I must say that I really did not have any until my last **Vocational interests** year in school. I had never looked forward beyond my school life. It came to me in a strange manner that the one who succeeded best was the one who had an *aim* in life. It happened, in the latter part of my senior year, that one of the girls gave a party to

our class. During the course of the evening the conversation came up as to what all the girls intended to do now that they were soon to graduate. Most of them were able to tell something; some wanted to fit themselves for teachers; others to do charity work. For the first time it then occurred to me that *I* should have an aim in life, other than merely going to school. From this time, I began to think and observe others, and finally concluded that the people who were interested in some special way were the ones who were really happy or doing much good."

"When I entered high school, I expected to be a teacher at some time. During my second year I attended a mission convention
Missionary zeal which so aroused my interest in missions, and my sympathy for my unfortunate fellow men in heathen lands, that I resolved to go to India as soon as I should be prepared for the work of a missionary. The conviction was a deep one. I regarded it with such awe that I never talked of it with any one save my nearest and best friends."

The following words of one student express clearly what many suggest as to the meaning of their high-school days:

"In such an atmosphere as I have described I lived my high-school days. I have forgotten New-
Chief value of ton's Law; I have forgotten
high school Chaucer's *Prologue*, but I never

shall lose one thing, and that is the broad attitude toward life which I gained in high school. It is all very well to emphasize the utilitarian value of a high-school education in these days of materialism, but after all this value, I believe, is largely mythical. What I want to emphasize in this paper is *the large vision and the grip on life* that I gained then."

With this we shall bring our chapter to a close. Many phases of life in the high school have not been touched on; but to give a sample of everything would be scarcely possible within the limits of this book.

Whether these reminiscences of high-school experiences are typical or not, those who know real boys and girls will have to judge for themselves.

Reference for further reading and study:

Book, W. F., *The High-School Teacher From the Pupils' Point of View*, *Pedagogical Seminary*, 12:239.

CHAPTER X

ECONOMIC RELATIONS AND SOCIAL INTERESTS OF HIGH-SCHOOL PUPILS

THUS far, our attention has been confined to the mental and physical characteristics of adolescence in general and of the high-school pupil in particular. We turn in this and the following chapters to a more specific study of the social relationships and habits of the high-school pupil. The general question before us is, what can be said of the character of the boys and girls who attend the American high school? Do they form a specific class which can be described in any particular or definite way? From what economic and social strata of the American public do they come? At what ages do they enter? What are their vocational interests, if any? What is their estimate of the value of a high-school course as measured by their intentions of finishing and by their conceptions of its relation to their life-work? In which studies are they most interested, least interested, and in which do most failures occur? How much time do they study outside of school hours; to what extent

do they work at home? Do they have opportunity to earn money outside; and in what ways do they earn money? How many evenings per week do they spend at home and how many parties, moving-picture shows and theaters do they attend per month? Answers to these questions would throw some light on the general character of the high-school population, which might be of much practical value to both teachers and parents.

There is already in existence a considerable body of data on various points such as have been mentioned above. Studies of particular groups of high-school children have been made and are being made which enable us to answer, in part at least, many of these questions. These studies have not, of course, been carried far enough to warrant our saying that the conclusions hold good for the entire country, but they show how information can be collected and the conclusions are certainly representative of large sections of the high-school population.

First of all, what economic and social strata of the American people send their children to the public high schools? The enormous growth in high-school attendance during the last two decades suggests that the children can hardly be said to be any longer a selected group with interests and aptitudes which are much alike. Twenty years ago the children who came into the high

From what economic and social strata?

schools were probably such as had a particular interest in the more intellectual types of training. Many of them were looking toward college or higher professional courses when they had finished high school. They were, on the whole, children of American parentage, and from homes which appreciated the value of the somewhat narrow nineteenth-century type of mental training.

But the public high-school population has increased in these twenty years from 254,000 to

**Great expansion
of high-school
population** 1,105,000 (1892-1912). In connection with this increase in attendance, the course of study has

been much expanded. The high school is now often called the "People's College." The air is full of arguments that it should afford practical training. The influx of such large numbers of children of every race and condition of life has lent much weight to the demand that the high school should adapt itself to the great variety of needs represented and, as far as possible, train each child according to his particular bent, and somewhat definitely for his particular life-work. This, we say, is a perfectly natural consequence of the present situation when the high schools are supported by the people as a whole, rather than by some special class of people among whom intellectual interests possibly predominate.

Van Denburg recently studied the racial, social and economic character of the homes of one thou-

Racial stocks in the New York high schools sand boys and girls who entered the high schools of New York City at a given time. (1) He found most of the racial stocks in New York, twenty-three in all, represented in this group of children. Children of American parentage were present to the number of four hundred forty-six; the girls exceeding the boys almost two to one. The Hebrew races, on the other hand, were found to send more boys than girls; the ratio being about five to four. The Italians were also represented by more boys than girls, in the ratio of three to two.

Taking into account the percentages of different races in the city as a whole and the percentage of each race represented in this high-school group, the Irish were found to be most poorly represented; next above them were the Italians; the Hebrews were highest of all in proportion to their numbers in the city. Van Denburg concludes that this latter race far exceeds all others, even the native born Americans, "in their appreciation and use of the New York high schools."

The rentals paid by the homes from which this group of one thousand children came showed to some extent the economic status of the parents. The rentals were determined for only four hundred twenty of the group, but, of this number, one hundred fifty-four came from homes paying only fifteen dollars per

month, and more than fifty per cent. were from homes paying from ten to twenty dollars per month. These figures indicate that the bulk of the homes represented were quite below the level of comfortable circumstances; for even twenty dollars per month will provide in New York City only a meagerly equipped apartment.

The fathers' employments showed to some extent the social condition of these high-school pupils.

Social conditions represented It was found that, considering the proportion of men in the city engaged in various vocations, the federal and city employees patronize the high schools in largest numbers; next come the parents engaged in the printing trades; third in the list are those classed as professional and semi-professional; fourth are the office workers and agents; fifth are the artisan-contractors and manufacturers and tradesmen. This latter group sends to the high school nearly half of all the children who attend, but they rank fifth in their use of the schools because of the large number of this class in the city. These conditions, discovered for New York City, may for the present be assumed to furnish a fair indication of the situation in many other very large centers of population, west as well as east. There is no doubt but that all nationalities patronize the American high school. It is probable, however, that in the medium-sized high schools of the smaller western cities children are more largely in attendance from all eco-

nomic levels rather than so largely from the poorer ones as was found to be the case in New York.

With reference to types of vocations represented in the Middle West a study was recently made by the writer of one thousand one hundred twenty-three pupils attending the high schools of three cities in Iowa, ranging from ten thousand to forty thousand in population.

The following table presents the results of this study, together with Van Denburg's figures for one thousand New York high-school pupils for comparison.

TABLE VI

THE FATHER'S VOCATION OF 1,123 PUPILS IN THE IOWA CITY,
OTTUMWA AND DUBUQUE HIGH SCHOOLS, 1913, COMPARED
WITH THOSE OF 1,004 HIGH-SCHOOL PUPILS
IN NEW YORK CITY

	Iowa	New York
Agriculture	151	...
Trade and manufacturing.....	268	227
Artisans	156	150
Middlemen and office workers.....	92	106
Transportation	75	46
Professional	93	36
Semi-professional	19	36
Clerical	30	52
City and Federal employees.....	40	61
Personal service	18	41
Printing trades	10	35
Unclassified	51	36
Blank	63	89
Retired	17	13
Dead	40	76

The figures for these two widely separated localities present many striking similarities, for ex-

ample, in the case of trade and manufacture and the artisans; and, in most cases, the differences noted may be easily explained. It is not surprising, for instance, to find the agricultural class an important one in Iowa. Some of the other differences, such as in the number of city and federal employees, those doing personal service, and those in the printing trades, suggests that the distribution of men in these various vocations is slightly different in the smaller western cities than in New York. But the fact that the children of men in professional work are found more than two and one-half times as frequently in these schools as in New York indicates that the schools in this section are even more democratic than in the East. The professional classes, quite as much as the humbler types of workers, see in the public high school a suitable place for the education of their children.

The high-school pupils' vocational intentions throw interesting light on the pupils themselves

Vocational intentions of high-school pupils

and probably have something to do with their persistence and success in their high-school work.

Van Denburg, in his study of the one thousand New York high-school pupils, found that forty-one per cent. of the boys and fifty-one per cent. of the girls were, on entering high school, either undecided as to their life-work or expressed no choice, which later may be considered as practically equivalent to being undecided. He found further, in

tracing the progress of these pupils through the following years, that they were much more likely to drop out of school early in their course than did those who had somewhat definite vocational plans. And of those who had such plans, those who had chosen careers necessitating high-school and college or professional school training, were more likely to remain and finish than those who had chosen, for example, business as a career. The actual figures were as follows: At the end of two years of the high-school course, sixty-eight per cent. of the boys and sixty-one per cent. of the girls "who were uncertain as to their probable future occupation had dropped out" of school, while sixty per cent. of the boys and fifty-five per cent. of the girls, irrespective of whether they had a future occupation in mind or not, had left school at the same time. "This would tend to show that the boy or girl, especially the boy, who has some definite occupation in mind lasts a trifle better than the boy with no such determination."

The variety of occupations chosen reveals to some extent the breadth of outlook of these high-school youths; forty different types of work were mentioned by the boys and twenty-one by the girls. Somewhat similar returns from eleven hundred and nine pupils in the three medium-sized high schools in Iowa reveal an even wider outlook among boys and girls in the central parts of the

Comparison of
New York
and Iowa

country. The following table presents the data from New York and from Iowa in parallel columns for comparison. The larger number of different occupations mentioned by the Iowa children and the smaller percentage who have no plans as to their future work are the significant points to note in this table.

TABLE VII

VOCATIONAL CHOICES OF 1,109 PUPILS IN THE 3 IOWA
HIGH SCHOOLS

		New York
Different occupations chosen by all.....	71	.....
Different occupations chosen by boys.....	54	40
Different occupations chosen by girls.....	30	21
Different occupations chosen by 2% or more boys	16	9
Different occupations chosen by 2% or more girls	10	7
Undecided or blank, boys.....	23%	41%
Undecided or blank, girls.....	23%	51%

Table VIII enumerates the different vocations chosen by five or more pupils of either sex with the numbers of New York pupils who also chose these vocations. Here again the general tendency is the same. Teaching stands easily first with the girls in both the East and the West, and engineering is likewise the favorite with the boys. Van Denburg accounts for the large choice of engineering in New York by the striking examples of great engineering enterprises which the boys see on every hand; the great bridges, tunnels, subways, railway terminals and lofty steel buildings. But an even larger number of Iowa boys have an interest in

engineering; boys who can, at best, have only read about these modern engineering wonders. Does this not indicate that there is something inherently attractive to boy-nature in the engineering pursuits? Among the vocations mentioned by considerable numbers of Iowa girls but apparently not at all by New York girls are nursing and domestic science. Law and business are apparently about equally attractive to both groups of boys; but the Iowa boys far exceed those of New York in their interest in medicine, and naturally also in farming.*

TABLE VIII

VOCATIONS CHOSEN BY 5 OF MORE PUPILS OF ONE SEX, IN 3
LARGER IOWA HIGH SCHOOLS

	Iowa		New York	
	Boys	Girls	Boys	Girls
Teaching	13	261	11	168
Engineering	94	..	78	..
Stenography and bookkeeping.	16	85	4	55
Law	32	..	24	2
Farming	34	..	1	..
Nursing .....	..	24	..	..
Medicine	30	3	7	1
Business	33	4	36	4
Music .....	..	23	1	19
Dentistry	8	..	2	..
Pharmacy	8	..	3	1
Salesman	16	..	2	..

*The basis on which the material from the Iowa schools was collected was not quite the same as that used by Van Denburg, hence the results are not strictly comparable. Van Denburg secured a report of vocational interests from pupils as they *entered* high school. Our reports are from pupils of *all* the high-school classes. The slightly more developed vocational interests of Iowa children are probably due to the inclusion of advanced classes.

	Iowa		New York	
	Boys	Girls	Boys	Girls
Mechanic	8	..	..	..
Army or navy.....	8	..	3	..
Labor	5	..	..	..
Domestic science .....	..	22	..	..
Keep house .....	..	8	..	2
Librarian .....	..	11	..	3
Physical training	1	6	1	1
Civil service	5	1	..	..
Office work	6	5	..	2
Architecture	6	..	7	..
Millinery .....	..	6	..	2

TABLE IX

DISTRIBUTION OF VOCATIONAL CHOICES IN 3 SMALL HIGH SCHOOLS.
THE NARROW RANGE, AS COMPARED WITH THAT OF
THE LARGER SCHOOLS, IS SIGNIFICANT

	Lisbon		West Branch		Granite Falls (Minn.)		Totals	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Teaching	1	18	..	12	1	39	2	69
Farming	6	..	14	..	15	..	35	..
Engineering ..	4	..	3	..	10	..	17	..
Nursing	0	2	..	..	..	4	..	6
Merchant	1	..	..	..	2	..	3	..
Mechanic	3	..	..	..	1	..	4	..
Bookkeeper ...	..	..	1	..	..	5	1	5
Stenographer .	..	..	..	1	..	4	..	5
Scattering. ...	2	1	1	4	9	11	12	16
Undecided	2	13	2	18	9	5	13	36
							87	137

Table X shows how much alike the choices of the two groups are; for only three vocations are mentioned by two per cent. or more of the New York children which are *not also* chosen by two per cent. or more of the Iowa pupils.

TABLE X

VOCATIONS MENTIONED BY 2% OR MORE NEW YORK HIGH-SCHOOL STUDENTS, BUT MENTIONED BY LESS THAN 2%
IOWA HIGH-SCHOOL STUDENTS

	Boys	Girls
Electrician	9	..
Designer .....	..	6
Dressmaker .....	..	7

Van Denburg found a close relationship between the high-school student's estimate of the value of high-school work and the length of his stay in high school. For instance, only forty-seven per cent. of these one thousand children when they entered stated that they regarded a high-school education as necessary for their purposes in life; the rest answered that it was not necessary or that they were uncertain as to its value. In following the high-school histories of these pupils, it was found that the expectancy of staying in and completing the course was much higher with those answering *yes* to both questions than with those answering *no*, or *undecided*.

The following are the exact figures:

50% of the boys who answer "yes" stay two years.

50% of the girls who answer "yes" stay three years.

50% of the boys and girls who answer "no" do not stay one year.

In Iowa it was found that a goodly percentage of children from all the classes seems to appreciate the

value of a high-school education. The following table gives the figures. The large number of Iowa boys who regard a college, or some higher school, as needful is very significant.

TABLE XI

PUPILS' ESTIMATES OF THE VALUE OF HIGH-SCHOOL
AND COLLEGE WORK

Iowa

Are 4 years in high-school necessary for your purpose?

	Yes	No	Uncertain	Totals
Boys	354	93	87	534
Girls	336	113	84	533

Do you intend to spend 4 years in high-school?

	Yes	No	Uncertain	Totals
Boys	470	44	34	548
Girls	534	47	33	614

Is a college education necessary for your purpose?

	Yes	No	Uncertain	Totals
Boys	337	113	87	537
Girls	297	206	114	617

Percentages Answering Yes

Are 4 years in high-school necessary?

Boys	66%
Girls	63%

Do you intend to stay 4 years in high school?

Boys	85%
Girls	87%

Is a college education necessary?

Boys	63%
Girls	48%

In Table XII are presented some figures as to studies in which the students of four Iowa high

Reaction to studies schools were most interested, least interested, and the ones in which failures were reported. It was thought in gathering this information that there might be some relation between a student's school interests, his vocational preference and perhaps even his intention to remain in high school for the entire course. We were not able to detect any such relationships from the data as they came to us, but the figures by themselves are of some significance.

TABLE XII

STUDIES IN WHICH THE HIGH-SCHOOL STUDENTS OF IOWA CITY,
DUBUQUE, BURLINGTON AND OTTUMWA ARE:

		Most Interested	Least Interested	Reported Failures
English	Boys	179	146	54
	Girls	321	118	44
Latin	Boys	64	106	87
	Girls	154	86	53
German	Boys	69	65	79
	Girls	192	78	50
Mathematics	Boys	286	120	143
	Girls	237	296	148
History	Boys	158	88	48
	Girls	153	160	53
Physical Science....	Boys	137	26	11
	Girls	89	46	17
Biology	Boys	31	19	4
	Girls	38	13	2
Commercial	Boys	70	10	9
	Girls	63	4	6
Manual Training....	Boys	55	5	1
	Girls	2	6	..
Domestic Science...	Girls	64	10	4

The differences between boys and girls in regard to English, Latin and German is especially interesting. Several questions arise in one's mind. For example, is the girls' preference for these subjects due to the fact that the intrinsic quality of the subjects makes more of an appeal to the girl-mind than to the boy-mind, or does the fact that these subjects are taught by women mean that they tend to be presented in ways better suited to arouse the girls' interest than the boys'? Both of these factors probably have their influence. On the other hand, boys surpass girls in their interest in mathematics, history and physical sciences, judged both by positive preference and by the much smaller numbers of boys who select these subjects as those in which they are least interested. From the small numbers of each sex who mention commercial subjects, manual training and domestic science as most interesting, we should judge, either that they are not largely elected or are not taught, thus far, so as to make a very definite appeal to children of the high-school age. Whether one or both of these conditions are true, it indicates that these so-called practical and semi-vocational subjects do not thus far awaken the interest in the pupils of these cities that the older and better standardized subjects are able to do.

As to failures, the various mathematical subjects easily outrank all others. This may be due to less

Mathematics difficult efficient teaching, to too great difficulty in the subjects or to too little willingness of large numbers of high-school pupils to overcome the difficulties that these branches present.

In connection with these figures regarding failures which are based solely upon the pupils' own reports and which, therefore, are subject to more or less error (probably in most cases in the pupils' favor) the following data are of interest.

TABLE XIII

THE NUMBER OF PASSING GRADES MADE IN VARIOUS SUBJECTS BY
1,042 PUPILS IN 23 SUCCESSIVE CLASSES IN THE
IOWA CITY HIGH SCHOOL

	Passing Grades	Failures	Percentage of Failures
English, including literature...	4,541	544	11%
Algebra	2,140	498	19%
Geometry	1,506	253	14%
History and civics.....	3,163	397	11%
Latin	2,693	468	15%
German	1,271	87	6%
Commercial work	644	45	7%
Physical sciences	1,189	111	9%
Biological sciences	1,013	82	8%
Manual training	678	32	5%

From the above table, covering an eleven-year period for a single high school, it appears, from the failures recorded, that algebra ranks first in difficulty. Latin is second and geometry a close third. While no percentages can be computed from Table XII for exact comparison with the data in Table

XIII, there is a striking similarity in the relative difficulty of subjects as there presented.

Author referred to in the text :

- (1) Van Denburg, J. K., *Elimination of Pupils From Public Secondary Schools*, New York, 1911.

CHAPTER XI

THE STUDY HABITS AND AMUSEMENTS OF HIGH-SCHOOL PUPILS

THE questionnaire, which yielded the data given in the preceding chapter for the four Iowa high schools, also called for a report from each student as to the approximate number of hours spent in study outside of school hours. Practically all high-school officials agree in thinking that unless some provision is made in school for longer periods of supervised study some *outside* study is both desirable and necessary, and this notwithstanding the arguments recently presented in certain popular magazines against home study.

These pupils were asked to check the one from five estimates which most nearly represented the amount of time spent per week in home study.

The following table gives the answers of fourteen hundred thirty-one pupils of these four schools.

TABLE XIV

HOURS OF STUDY PER WEEK OUTSIDE OF SCHOOL
(4 IOWA HIGH SCHOOLS)

	0-4		5-8		9-12		13-16		17-20	
	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.
Dubuque	13	18	123	100	27	48	10	14	2	3
Iowa City ...	21	20	91	115	50	69	11	30	8	3
Ottumwa	8	13	96	118	42	88	11	27	1	6
Burlington ...	17	20	51	77	23	32	4	15	2	4
Totals	59	71	361	410	142	237	36	86	13	16

Here, as in the answers to the previous questions, there is doubtless more or less inaccuracy with the probabilities lying on the side of an over- rather than an under-estimate. The correspondence in the times given by the students of the different schools is very striking and indicates that in spite of errors in individual cases these estimates represent fairly the distribution of Iowa high-school pupils as to the amount of time spent in home study. Five to eight hours of home study per week is the most common report. Whether this is enough time for the average pupil, each high-school principal must judge for himself. It is, at any rate, of some importance in dealing with the high-school situation to know the actual distribution of our pupils in this matter of home study.

It was thought that there might be some relation between success in studies and amount of home study. The reports of two hundred forty-four Burlington pupils in the tenth, eleventh and twelfth grades were studied with this question in mind, but there was no relationship apparent from the data furnished by the students. The results were as follows:

Hours per week in home study	Percentage failing 1 or more times	Percentage failing 2 or more times
0-4	56%	33%
5-8	45%	29%
9-12	54%	36%
13-16	17%	17%
17-20	0%	0%

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While there seems to be no relationship in terms of mere failures, there is, no doubt, a relationship in terms of the quality of work done if we but had its measure in actual grades. This is a point on which we must for the present defer a definite answer.

The pupils in these four Iowa schools reported themselves as spending entire evenings per week at home, as follows:

TABLE XV

ENTIRE EVENINGS PER WEEK SPENT AT HOME AS REPORTED BY
PUPILS OF 4 LARGE IOWA HIGH SCHOOLS
(1st Columns, Boys)

EVENINGS	7	6	5	4	3	2	1	0	
Iowa City....	12 34	17 24	39 53	30 50	43 25	23 11	6 1	11 4	
Dubuque....	6 19	13 18	28 42	40 59	43 30	27 6	10 1	7 0	
Burlington ..	6 10	6 14	31 45	35 53	19 12	15 2	3 0	4 2	
Ottumwa....	7 14	9 36	24 78	38 94	40 37	19 7	4 1	9 0	
Totals.....	30 77	45 92	122 218	143 256	145 104	84 26	23 3	31 6	
Percentages..	8%	9%	24%	28%	18%	8%	2%	3%	

Grand total, Boys 623; Girls 782.

SIMILAR REPORT FROM TWO SMALL SCHOOLS

EVENINGS	7	6	5	4	3	2	1	0	Total
West Branch..	1 5	8 8	2 7	4 4	1 ..	.. ..	3 5	23 33	
Lisbon.....	4 3	2 5	4 7	2 5	1 7	3 5	1 1	4 2	135
Totals.....	4 4	7 13	12 15	4 12	5 11	4 5	1 1	7 4	68

It will be seen from this table that the boys most commonly report three and four evenings out of

the week at home and the girls four and five. Not many of us will feel that this report is altogether auspicious for the good of the high-school pupils. When the number of evenings per week spent at home falls below five on the average, one can not help but feel that home life and home influences are playing too little part in the lives of these adolescents. Fifty-nine per cent. spend four evenings or less at home.

In order to see what relation might exist between success in school and evenings at home, the answers of the entire fourteen hundred pupils were reexamined, and the number of failures reported by them were distributed according to the entire evenings per week which they reported themselves as spending at home. Tables XVI and XVII give the results of this inquiry.

TABLE XVI

RELATION BETWEEN NUMBER OF PUPILS FAILING ONE OR MORE
TIMES IN STUDIES AND ENTIRE EVENING SPENT
AT HOME PER WEEK

Evenings	7	6	5	4	3	2	1	0
Number of cases..	46	42	86	80	68	34	7	15
Iowa City								
Per cent. failing...	14	36	27	28	50	64	70	74
Number of cases..	25	39	81	99	73	35	11	7
Dubuque								
Per cent. failing...	12	20	30	34	50	46	55	86
Number of cases..	15	28	66	78	31	17	3	6
Burlington								
Per cent. failing...	47	20	47	48	58	65	100	67
Number of cases..	21	46	102	132	77	26	5	9
Ottumwa								
Per cent. failing...	48	37	36	47	51	51	60	45

TABLE XVII

DISTRIBUTION OF NUMBER OF FAILURES PER HUNDRED PUPILS
ACCORDING TO EVENINGS AT HOME

Entire evenings at home	7	6	5	4	3	2	1	0
Iowa City	20	48	53	59	89	86	114	153
Dubuque	24	23	51	55	100	117	72	157
Burlington	80	31	98	105	180	206	300	166
Ottumwa	76	69	51	93	100	104	120	90
Averages	50	43	63	78	117	128	152	142

Pupils reported as spending four to seven entire evenings per week at home average fifty-eight failures per hundred pupils.

Pupils reported as spending from none to three evenings per week at home average one hundred thirty-five failures per hundred pupils.

A recent study of three hundred eighty delinquent pupils in the Minneapolis high schools(1) revealed the fact that forty-six per cent. of them confessed that they were "out" the larger share of evenings in a week. No data were reported as to the home-staying habits of the pupils whose school work was up to grade, but in the light of the returns from the Iowa high schools it is fair to assume that there was a direct relation between the delinquency of those Minneapolis pupils and the little time they spend at home.

The preceding information regarding these fourteen hundred pupils in the four Iowa high schools relates more or less directly to their school work and school interests. It might be interesting to

know, in connection with this, something of what these pupils are doing aside from their school work, whether they help at home, whether they earn money or not and the extent of their participation in certain forms of amusement.

The following table gives the answers to the question—Do you have work at home? The data are given separately for each city in order to show how far there is any uniformity in this particular.

TABLE XVIII

DO YOU HAVE WORK AT HOME?

	Yes		No	
	Boys	Girls	Boys	Girls
Iowa City	156	197	33	32
Dubuque	140	143	24	34
Burlington	87	142	10	20
Ottumwa	154	242	7	16
	<hr/> 537	<hr/> 724	<hr/> 74	<hr/> 102

Grand total: 1,437.
Yes, 88%; No, 12%.

The fact that the girls slightly exceed the boys in helping with home work is natural in view of the sort of work that is usually available for children in city homes. It is encouraging for those who believe that children should learn to participate in home duties to note the large percentage of these pupils who report such participation. In the study just referred to, of three hundred eighty delinquent pupils in the Minneapolis high schools it was found that the number who reported home work of any

kind was much less. Whether, however, there is any general connection between lack of home work and delinquency is a subject demanding further investigation before it can be definitely answered. It is natural to suppose that a complete absence of all responsibility at home might lead to an excess of outside activities which would interfere materially with school success. The only data from which we could infer the school standing of these Iowa pupils were the number of semester failures reported by each pupil, and there was no apparent relation between these failures and home work or lack of it.

The distribution of time spent at home work by these pupils was given by them as follows:

TABLE XIX

TIME PER DAY SPENT BY IOWA HIGH-SCHOOL PUPILS AT
HOME WORK

(Left-hand numbers, boys)

0		Less than 1 hr.		1-2 hrs.		3-4 hrs.		5-6 hrs.	
74	102	51	69	263	343	67	113	46	54

The question next arises—Do any of these pupils who do not work at home have work of some sort outside of home? Some of these do, but it happens quite as frequently that they do no work of any kind while those who report home work also quite as often report that they work outside also. In answer to the question—Do you earn money outside of school? the following information was

secured: Yes: Boys, 426; Girls, 192. No: Boys, 205; Girls, 665; 68% of the boys and 22% of the girls reporting that they earn money in one way or another outside of school.

It is of some interest to know the kinds of work mentioned by these pupils. This is given in Tables XX and XXI.

TABLE XX

KINDS OF WORK FOR WHICH MONEY IS EARNED, MENTIONED BY 2
OR MORE PUPILS

Clerking	92	Usher	4
Odd jobs	70	Picture show	4
Helping at home.....	48	Printing	3
Delivering papers	244	Reporting	3
Farming	19	Telephone office	3
Music teacher	16	Elevator boy	3
Vacation work	15	Automobile and motor	
Music and singing.....	14	cycle repairs	3
Collecting	12	Distributing ads	3
Delivery boy	11	In bank	3
Shop and office.....	10	Engineering gang	2
Caring furnace	10	Tailor	3
Factory, mill, etc.....	10	Painter	2
Canvassing	9	Hunting	2
Office attendant	9	Fancy work	2
Chauffeur	8	Railroad office	2
Photography	8	Newspaper office	2
Artist	6	Sheet metal	2
Poultry	6	Mechanic	2
Waiter	5	Baking	2
Barber	5	Y. M. C. A.....	2
Janitor	5	Salesman	2

KINDS OF WORK MENTIONED BY 1 PUPIL ONLY

Reading gas meters	Dentist's office
Millinery	Selling peanuts
Staying with neighbors nights	Running a boat
Checking	Soda fountain
Making pennants	Electrical work
Selling cream	Helping neighbors
Selling milk	Automobile sales
Typewriting	Substitute teacher

Fishing	Sanatorium
Delivering eggs	Messenger
Mowing lawns	Greenhouse
Pumping church organ	Engineer
Plumbing	Artist's model
Garage	Carpentry
Window trimming	Library work
Sewing	

TABLE XXI

DIFFERENT KINDS OF WORK MENTIONED BY BOYS AND GIRLS

	Boys	Girls	Combined
Iowa City .....	..	..	37
Dubuque	36	6	39
Ottumwa	36	17	44
Burlington	23	15	35

The considerable variety of work which high-school pupils in these cities find to do is significant.

Bearing on "juvenile occupations" problem While a number of these employments would have to be classed as "juvenile occupations," and as not leading anywhere in particular, "a juvenile occupation" is not altogether to be condemned in these cases. When a boy or girl is in school, such a type of work, even though it does not lead directly to any future vocation, is a steadying influence upon the youngster, serving to give a little experience in personal responsibility and in the practical side of life. The experience of earning money for one's self, even in a temporary employment, is a preparation for future work that is decidedly worth while.

It is hardly to be expected that many high-school

pupils, with the best part of their day given up to school work, should find much time outside to spend in preparing for any particular vocation. And yet, out of the six hundred eighteen who report themselves as earning money, thirty-six or nearly six per cent. are doing outside work more or less directly related to what they are planning to do when they leave school. Table XXII shows just what these employments are.

TABLE XXII

RELATION BETWEEN OUTSIDE WORK FOR PAY AND VOCATIONAL INTENTIONS

Collection	1	Banking	2
Office work	1	Manufacturing and artisan	2
Teaching	1	Engineering	2
Domestic science and art.	4	Automobile repairing	1
Clerking	2	Tailoring	1
Teaching music	6	Dentist's office	1
Singing and music.....	4	Railroad office	1
Farming	4	Artists	2
Salesmanship	1		

In view, however, of the present interest in vocational education, the question may be raised as to whether the conditions here shown are as favorable for our high-school boys and girls as they should be. Should not the school and the community attempt to provide more opportunity for these pupils to get work which will minister more directly to their vo-

cational interests? As long as the school studies pursued by these pupils are so largely of the purely "liberal" or cultural type, there can, of course, be little relationship between school work itself and work outside. Furthermore, it must be recognized that many types of vocational interest, such as engineering, law, medicine or teaching, could not usually find any opportunity for expression during the school years. But there are also many interests which might find expression while the pupil is in school. To bring about such a connection, the school on its part would have to give more attention to cultivating the vocational interests of its pupils. With no special effort on the part of the school to cultivate such an intelligent insight into the diverse opportunities of the modern world, the range of interests already possessed by these Iowa pupils is comparatively limited, as we saw above in Table VIII. If the school would undertake to enlighten its pupils systematically as to vocational opportunities, if it would also provide more vocational studies and give more attention to the practical relationship involved in the ordinary studies, the pupil would be provided with a better basis on which to go out into his community and choose his work.

But the *community*, also, should do something, perhaps under the leadership of the school. The **The community's responsibility** modern community should be led to take a more direct interest

in the future of its children than is expressed in simply providing them with the ordinary school opportunities. People engaged in different lines of work should feel a responsibility for providing ways for boys and girls who are inclined in various directions to gain a little experience in the work that interests them while they are going to school.

The industrial schools have already begun to work out and apply various schemes of part-time employment for their pupils in the trades, but what we have in mind here is a more general and less intensive application of the idea. Not that the boy in the ordinary high school who wishes to work shall be employed in some trade, for example, on alternate weeks, but rather that opportunities shall be carefully developed in every community, whereby many such boys and even girls shall gain some slight contact with different vocations in their outside work. Such contact should give the youngster not merely a chance to make a little money, but also an insight into, and practical appreciation of, the requirements of the vocation he wishes later to follow.

As to the social and recreational interests of these fourteen hundred Iowa high-school pupils, the following table summarizes the returns as to the number of parties, moving-picture shows and theaters per month which they report themselves as attending. The reports from different cities are fairly uniform.

Parties per month

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TABLE XXIII

PARTIES PER MONTH ATTENDED BY IOWA HIGH-SCHOOL PUPILS
(Left-hand numbers, boys)

None or less than 1	1	2	3	4	5	6	7	8 or more
196 161	117 199	128 216	56 94	36 58	22 31	10 28	2 2	9 4
26	28	25	11	8	4	2	0.3	1

About 48% attend 1-2 parties per month.

About 26% attend more than 2 parties per month.

About 26% attend none or less than 1 party per month.

MOVING-PICTURE SHOWS PER MONTH

0	1-3	4-6	7-9	10-15	16 or more
91 176	158 265	185 197	57 63	71 64	53 43

THEATERS ATTENDED PER MONTH

None or less than 1	1	2	3	4	5	6	7	8 or more
109 230	15 184	161 138	58 61	75 85	23 19	26 19	9 4	30 16

As in the case of preceding tables the reader will have to interpret these figures for himself. Pos-

**Is the time de-
voted to these
diversions ex-
cessive?**

sibly no one of these diversions,
by itself, is indulged in by large
numbers to excess, but taken to-
gether they represent a consider-

able expenditure of time in at least three forms of diversions. In most cases the pupil who goes to few or no parties does not indulge in the other forms of amusement. The general tendency is for all to be represented in about the same proportion in the pupils who do participate at all. These figures will be taken by some as a proof of the statement often made that it is not the school work as such which is injurious to the health of the ordinary

adolescent, but that he suffers most from the multiplicity of his *outside* interests.

In connection with the figures given above, the following words of Miss Slattery, regarding the girl in her teens, seem to strike very nearly the truth of the matter. She writes: "So many of our girls are 'nervous.' An eighth grade teacher told me recently that she had fifty girls in her class and that according to their mothers, forty-one of them were 'very nervous.' It seemed to her a large proportion even for girls in their early teens, and she began a quiet study of some of them. One of the 'very nervous' girls who, her mother thought, must be taken out of school for a while, takes both piano and violin lessons, attends dancing school, goes to parties now and then, and rarely retires before ten o'clock. Another 'very nervous' girl takes piano lessons, goes to moving-picture shows once or twice a week, hates milk, can't eat eggs, doesn't care much for fruit, and is extremely fond of candy. In each case investigated there seemed to be much outside of school work which could explain the nervousness." (2)

Authors referred to in the text:

- (1) Hobbs, W. W., and others, *An Inquiry Into the Cause of Student Delinquency in the Minneapolis High Schools*. *School Review*, 20:393, 1912.
- (2) Slattery, Margaret, *The Girl in Her Teens*.

CHAPTER XII

THE RELATION OF SUCCESS IN HIGH SCHOOL TO ENTERING AGE

OUR study of the physical and mental characteristics of the teens has suggested that there is a close relationship between these developmental phases in the pupil and his school record. Moreover, external social conditions, over which the pupil has no control, such as nationality and occupation of parents on the one hand, and on the other the pupil's own vocational interests and plans, his outside study and work, and his amusements, which he does control, in part at least, and which are to some extent the reflection of physical and mental transformations which he is undergoing; all these also play some part in determining how successful he will be as a pupil.

The influence of all these factors, physical, mental and social, depends to some extent on the age of the pupil. The internal factors of his own physical and mental being and his response to certain social conditions develop at different ages and exert correspondingly different degrees of influence. The age of the pupil

in years becomes, then, a significant fact to take into account in any inquiry we may make into his efficiency at a particular time. Mere age is, of course, only a rough measure of various underlying and less easily determined conditions, but, rough though it may be, it is of value because it yields to definite quantitative statement. Age is not even itself a cause, it is rather an index of certain influences which can not in themselves be so definitely put down in numerical terms.

If we had accurate information of inner changes and the quality of work of a considerable group of pupils and if, also, we knew definitely the social, economic and recreational habits of these pupils we might be able to state in numerical terms the relation of the former to the latter. The obtaining of such information, while difficult, is not impossible, and accurate statements can be made as soon as some one appears who has the time and the patience to collect the necessary data. But the data as to age and school success is already available and has, in a few places, been carefully worked over. The results are interesting and suggestive. The relationships that appear are sufficiently definite to promise much to the student who will have the patience to secure measurements of the underlying changes which age in years only roughly indicates.

From studies thus far made we may gain some idea of the probable ability, at the time of entering high school, of high-school boys and girls as com-

pared with school children in general. We can also tell something of the relation between entering age and degree of success attained later in high-school work.*

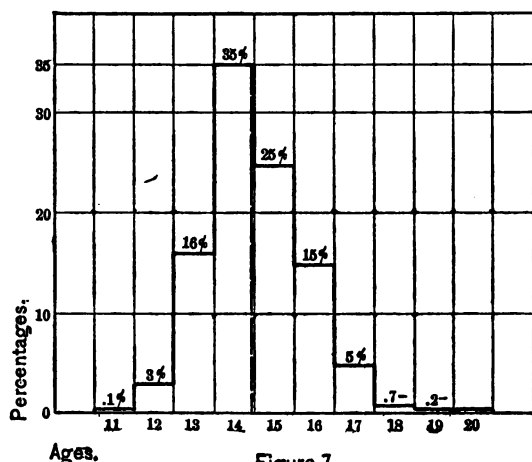


Figure 7.

Age distribution of 1033 pupils entering the Iowa City High School in 23 consecutive classes. Median age approximately 14.9.

If the records of entering, or ninth grade, classes of any large high school are examined, the pupils will usually be found to range in age from twelve to seventeen years, with now and then an

Range of age
of high-school
entrants

*The data for this discussion are drawn partly from Van Denburg's *Elimination of Students in Public Secondary Schools* and, partly, from an unpublished study by Mr. J. J. Dynes, sometime a graduate student in the State University of Iowa, entitled, *The Relation of Retardation to Elimination in High-School Students*.

eleven-year-old and a very few over eighteen. Figure 7 shows graphically the distribution of entering ages, for twenty-three successive classes, in one medium-sized high school in Iowa. The sexes are combined in this curve since there is little difference in the showing made by boys and girls separately. It will be seen that, for this school, the most common entering age is from fourteen to fifteen. The median age of all entrants was about 14.9 years. The median entering age of the one thousand high-school pupils in New York City studied by Van Denburg was found to be slightly less, namely 14.5. It would be of great value to know what degree of physiological development had been attained by each of these age groups at the time of entrance into high school. This we have no data for determining, but it is probable that most of both sexes were either maturing or matured, with frequent cases, however, of immature children especially in the age groups below fifteen.*

The fact of greatest significance in this distribution of entering ages is that the median age is less than fifteen years; that is, one-half of all the pupils studied in these two cities entered before fifteen. This fact, we say, is significant because it throws some light on the ability of these ninth graders. In Iowa City the children entering the

**Significance of
low median age
of entrance**

less than fifteen years; that is,
one-half of all the pupils studied
in these two cities entered before

* Cf. Table XXIV, page 193.

elementary schools probably average six years of age. In New York City the average age of entrance is given as seven. If these Iowa children are regularly promoted they finish the elementary course in eight years or at the end of their fourteenth year. Similarly, New York children would normally finish the elementary schools at the end of their fifteenth year. If, then, more than half of those who enter high school enter earlier than at the above mentioned ages, they have at one or more points in their elementary-school work skipped grades or gained special promotions. Every such incident in the school-life of a child is an indication that he has possessed, at one time or another, more than average ability. Those who are ready for high school at twelve must have made several such special promotions.

Now, if we contrast the proportion of those specially promoted who enter high school with the number of special promotions in the entire elementary-school population we can get a rough measure of the ability of high-school entrants in comparison with the ability of school children generally.

Evidence of superior ability of high-school entrants

In New York City, accelerated pupils occur in the ratio of about one to twenty-three of the total elementary-school population. When, therefore, sixty-four per cent. of this New York group enter

high school at or before fifteen years of age, and thirty per cent. before fourteen, we can see that the ability of these children is decidedly above the average of elementary-school ability. At least sixty-four per cent. have been ranked by previous teachers as successful scholars and the thirty per cent, who entered under fourteen years were certainly decidedly above the average according to the standards of the elementary schools. Thus, while about *one in every twenty-three of elementary-school children* gain special promotions, *one in three of those who come to the high schools* have apparently gained one or more of such promotions.(1)

The number of early entrants into high school is not so large in Iowa City as in New York, especially when we take into account the earlier average entrance of these children into the primary school, but it is still large enough to be significant. The group in this latter city that entered before fifteen, the normal age of entrance, constituted fifty-four per cent. of the total, and of these, something over nineteen per cent. entered even before fourteen. These children, approximately one in five of all who entered, were thus marked by their grade teachers, through special promotions, as of more than average ability.

Such, then, is the status of these children as they enter high school. The interesting question

Their subsequent records what? now arises as to the subsequent records made by them in their high-school work. Is there any relation between entering age and the pupil's likelihood of finishing his course? Is there any relation between his entering age and his subsequent high-school scholarship? The first question can be answered definitely and it throws considerable light on the second question which can not be answered so fully.

In general, it was found, in both Iowa and New York, that a larger proportion of the earlier entrants finished than of the later entrants. Thus, in the Iowa school studied, it was found that a much larger proportion of the group which entered high school between twelve and thirteen finished in four years than in the case of any other older entering group; forty-six per cent. of them finishing on time while of those entering between thirteen and fourteen, forty per cent. made normal progress and finished in four years; thirty-two per cent. of the fourteen-year-olds; twenty-two per cent. of the fifteen-year group; thirteen per cent. of the sixteen-year group, and nine per cent. of the seventeen-year group. On the other hand the percentage of pupils dropping out increases rapidly as the age of entrance increases, starting with twenty-seven per cent. in the youngest group and running up as high as seventy-nine per cent. in the sixteen-year-old group.

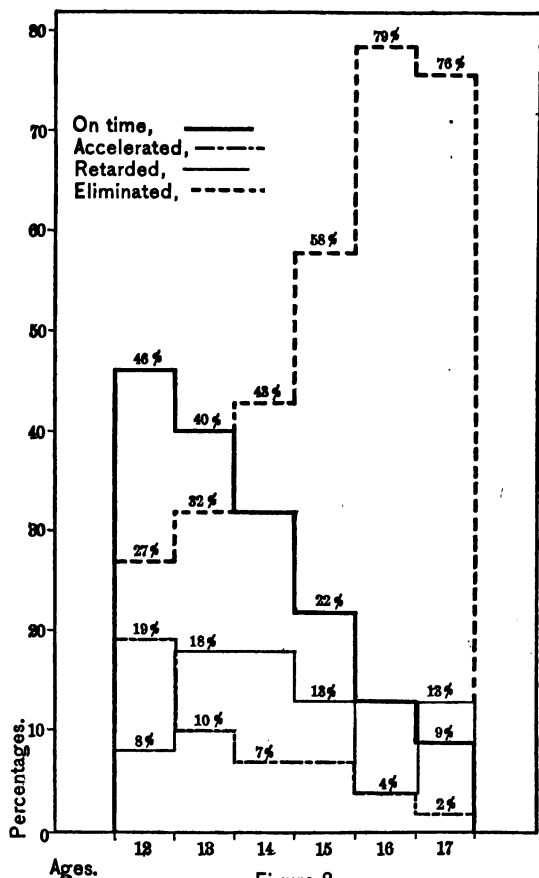


Figure 8
Graphical showing of the percentages of 1033 Iowa City High School pupils of different entering ages, from 12 to 17 inclusive, who were accelerated, retarded, eliminated, or graduated on time; i.e., in four years.

Figure 8 shows the relative numbers of normal, accelerated, retarded and eliminated pupils for each

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**More ready
adjustment by
younger pupils**

entering age group. The facts presented to the eye by this figure are certainly sufficiently impressive. They show, at least as far as eleven and a half years' experience in this high school are concerned, that the younger pupils adjust themselves more readily to the high-school régime and, being adjusted to it, do the work more successfully than do the older pupils. We can not tell just what relationship physiological maturity or immaturity bore to the varying success of the younger and older pupils in the classes above studied; but it is fortunately possible to give the actual distribution of degrees of maturity of a single ninth grade class which entered this school after the twenty-three classes represented by Figure 8 were studied. The following table shows the age groups represented in this class, with the number in each group who are immature, maturing and mature.

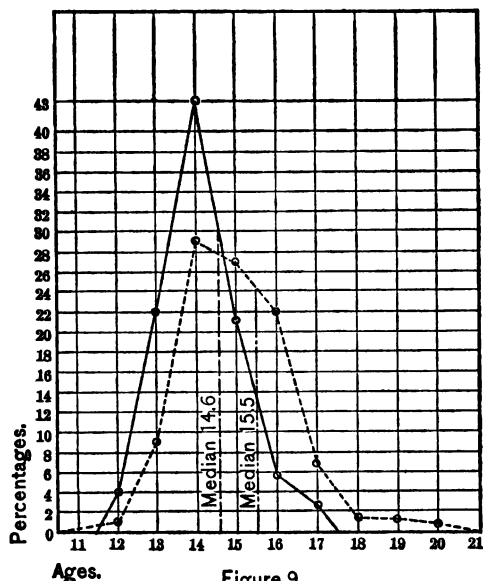
TABLE XXIV

DISTRIBUTION OF DEGREES OF MATURITY IN THE VARIOUS AGE GROUPS OF A NINTH GRADE CLASS IN THE
IOWA CITY HIGH SCHOOL

(Left-hand numbers in each pair denote boys)

AGES	IMMATURE		MATURING		MATURE		TOTALS	
12.....			1				1	
13.....	4		1	3	1		6	3
14.....	3		7	3	14	17	24	20
15.....			1		13	21	14	21
16.....			1		10	5	11	5
17.....					6	2	6	2
18.....					2	1	2	1
Totals.	7	.....	11	6	46	46	64	52

The distribution shown in the above table is probably typical of all recent classes. It will be seen that the number of immature individuals in this class is comparatively small, about six per cent., and that of the maturing and mature groups, forty-six per cent., are under fifteen years of age. If this class is really typical of the previous twenty-three, we may



Distribution of the entering ages of the graduates,——, and non-graduates,-----, of 23 classes in the Iowa City High School.

infer that the large number of early entrants who graduated in these classes consisted mostly of early maturing children. It is not likely, at least, that the success of the younger pupils represented in Figure 8 was due to any great degree of immaturity, for the probability is that very few of them were physiologically immature.

The single fact that those who graduate in this school form, on the whole, a younger class of children than the non-graduates is shown by Figure 9. While the median age of all entrants was found to be 14.9 years, the median age of those who remained to graduate was 14.6 years and of those who dropped out without graduating, 15.5 years.

This same superiority of the younger over the older children in the expectancy of their completing the high-school course was found by Van Denburg to obtain among the one thousand New York City children whose histories he studied in detail. He found, for instance, that of those who entered under fourteen almost twice as many remained to finish as of those who entered at fifteen or over.

The following table presents for easy comparison the facts for these nearly equal groups in Iowa and in New York.

TABLE XXV

COMPARATIVE GRADUATION EXPECTANCY OF THE VARIOUS
ENTERING AGES IN IOWA AND IN NEW YORK

	Iowa	New York
12-13	65%	23%
13-14	50%	19%
14-15	39%	10%
15-16	29%	6.5%
16-17	17%	3.5%

The downward trend of the percentage as the entering ages increase is the significant fact of the above figures for both localities. Incidentally it is also interesting to note how much larger is the proportion of western children who graduate on time.

On looking over this table we may say with Van Denburg that, "as far as age is concerned, thirteen is the ideal age for high-school entrance" or even between twelve and thirteen. Connecting this finding with our earlier discussions as to the physiological and mental changes of the earlier half of the teens, we may conclude that these changes are, on the whole, unsettling and that the child who can make the transition from the grammar school to the high school early is more likely to get adjusted to the conditions he finds there and finish the course than one who enters in the very midst of the mental changes that are likely to occur at fourteen and fifteen. Moreover, inasmuch as the period of rapid physical development begins for most children before fourteen, these figures seem to confirm the assertion made in Chapter III, that the physical changes that occur early do not in

themselves usually lessen the child's school ability, while the mental readjustments which follow the physical changes have a decided tendency to unsettle the pupil.

Whatever the immediate causes may be of the dropping out of the older entrants, we should not

Period of mental readjustment apparently unfavorable for entrance	at least lose sight of the fact that these pupils are, at the very beginning of their course, undergoing more or less profound
--	--

changes, intellectual and emotional, and that these changes in inner attitude can not fail to influence them in definite ways toward their studies, toward immediate social matters and toward the multitude of general social and economic influences in their local environments. The boy who enters on his high-school course when he is in the throes of the "new birth" into the social world, or when he is gripped by the intense longing for "larger things," when he begins to feel the impatient vague idealism of the middle teens, or when he is absorbingly interested in his girl associates, and is, above all, eager for adventure and to play a "man's part" in the world, such a boy will yield himself unwillingly to the narrow round of school tasks with their exacting requirements. He will inevitably find himself "looking over the edge of his school work," wishing for his real life to begin. He will, if he is an average boy, grasp at almost any pretext to quit school.

We do not believe, however, that there could not be a school which would hold the majority of boys and girls in their middle teens.

Present high schools not well adjusted to needs of older pupils

We only know that, at present, the work of the first two years of high school is not well adapted to retaining the boys of fourteen and fifteen who enter in large numbers at these ages. It is likely,

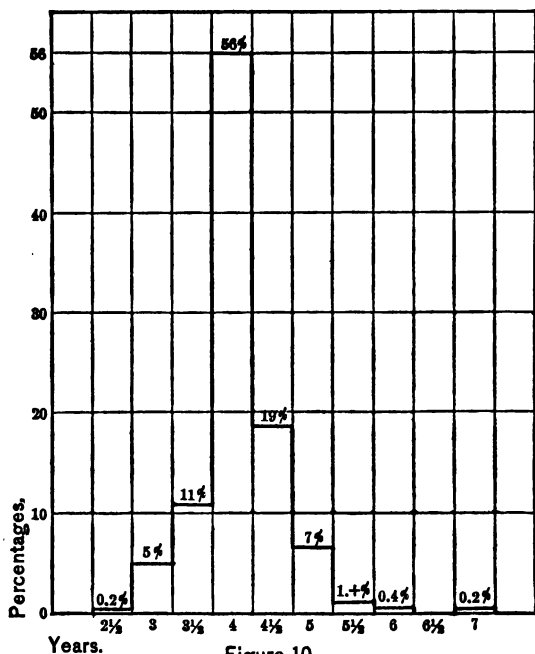


Figure 10.

Distribution of 491 Iowa City pupils as to actual time spent to complete the High School course.

since the twelve and thirteen year olds "stick" better, that the subjects and methods of teaching are better adapted to their needs than to the needs of their older classmates.

It is possible also that the greater success shown by these younger pupils is due to their greater native ability, which they show themselves to possess by the very fact of their earlier entrance. If this fact lies nearer to the real cause of their greater success, we should have to say that it indicates that the work of the high schools is pitched on too high a plane for the boys and girls of average ability to succeed with it. In any case there is lack of adjustment either to the average age or to the average ability of the high-school pupil as we find him in our schools at present.

Another graph, Figure 10, may be presented, not, however, bearing on the question of age and success in school, but answering the question as to how long a time those who actually graduate take to complete the high-school course. It will be seen that the range of time is from two and one-half to seven years; the most common time being, of course, four years. The amount of variation from this time is, however, significant. There are no corresponding figures in the New York study.

Thus far, in this chapter, we have confined our attention to the influence of age of entrance into

**Quality of work of
the graduates and
non-graduates**

high school on later success, this being measured solely in terms of graduation in four years. The quality of work done by these pupils has not otherwise been considered. The question now arises—do these pupils who stay in and finish do any higher grade of work than those who drop out? Is the dropping out related to a lower grade of work, or do the eliminated pupils while in school do as well as those who remain to finish? We should hardly suppose, to start with, that the eliminated pupils would be high-grade pupils. If their work is inferior, however, we should not conclude that lack of ability to do the work is the sole cause of their stopping school. This poor work might be due in part to their greater interest in things outside of school. These two factors we are not here able to separate. They are probably always operative together, the one augmenting the other. A greater absorption in things outside of school will make even a bright boy neglect studies. Inferior success in his studies will still further reduce his interest in them. On the other hand, the duller boy who finds he does not get on well in school will turn his attention to things outside. All inquiries into the quality of work of graduates and non-graduates unite in the finding that the latter group is, as a whole, inferior to the former; but they do not show how far this inferiority is due to lack of ability and how far to “other interests.”

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It is true that there is a suggestion that the poor work of the non-graduates is due, in a measure, to lack of ability, in the fact that the graduates usually possess a higher ability to start with as indicated by their earlier entrance; but, even so, the ability is of that somewhat narrow range which is tested by school standards. We know that much general capacity may fail to be detected through the record of the pupil at school tasks.

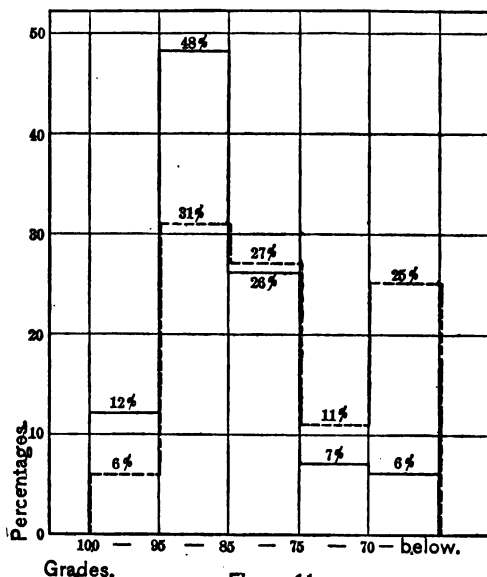


Figure 11.

Distribution of grades made by 1042
high school pupils.

Graduates. —————

Non-graduates. - - - - -

In the following paragraphs we present the results of typical studies on the relation of quality of work to elimination.

The study of the records of the one thousand forty-two pupils of the Iowa City High School, **Illustration from Iowa** previously referred to, showed that the non-graduates were inferior in scholarship to the graduates. The facts are presented in Figure 11, and require little further comment. Only one-third of the highest grades, ninety-five to one hundred, belonged to the non-graduates. Two-fifths, only, of the grades, from eighty-five to ninety-five, belonged to those who dropped out. Nearly an equal number of grades, from seventy to eighty-five, were made by both groups, while the grades below seventy, the passing mark, were recorded for non-graduates more than four times as frequently as for the graduates.

While these figures show that the non-graduates did, on the whole, work inferior to the graduates, they show also that a large number of the non-graduates did average and some even superior work.

Van Denburg had his group of one thousand New York pupils rated by their teachers as to **Illustration from New York** ability, industry and results. This rating was done soon after they entered on their first semester's work in their various high schools.(1)

One-half of the pupils, ranked as high, average

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and low from these three points of view, remained in high school as follows:

	High	Average	Low
Ability	3 years	1½ years	½ year
Industry	3½ years	1½ years	1 year
Results	3 years	1½ years	1 year

It was also found that the average standing, or mark, made by these pupils in their first term's work, bore an important relation to the likelihood of their continuing in school. For instance, one-half of all who made an average grade of less than fifty per cent. left before the beginning of their second half-year.

The median expectancy of the various grades of pupils, according to their first term's average mark, is summarized in the following figures:

1st Term's Marks

0-49%	½ year
50-59%	1 year
60-69%	1½ years
70-79%	2½ years
80-100%	4 years

This study does not give any data as to the later marks made by these pupils; but it is significant that the first records made by them, and their first impressions on their teachers, forecast so definitely their later school history. If these standings represent with approximate fairness the later grades, we can say that here, also, there is a distinct tend-

ency for the eliminated pupils to be of inferior scholarship.

A study by Johnson of the grades in English, Latin, mathematics and history made by

Evidence from Chicago and Kansas City pupils of high schools in Chicago and Kansas City, revealed the same tendency, namely, lower

grades on the whole for the eliminated pupils, the percentage of elimination increasing steadily as the grades became lower. This tendency was less marked in the case of four small schools investigated by Johnson, the pupils who left being more evenly distributed among all grades of proficiency. It is possible, as Johnson says, that this is because the small high school provides opportunity for more individual attention to poorer pupils so that they are less likely to become discouraged and quit.(2)

We are, ourselves, inclined to doubt that the better showing of small schools in keeping their

Is the small school really superior? pupils is due to any superiority of these schools in the matter of handling their pupils. It is rather

because the conditions generally in small communities are more favorable than in larger ones to continuing in school. More inferior pupils remain to graduate because it is apt to be the understanding in a small town that practically every one who remains steadfast to the end of the course will receive a diploma. It is very hard, in such communities, where the teachers are fairly well known to most

of the parents, actually to fail any pupils who are just below the border line of passing. Only very extreme cases are likely to suffer loss of the diploma. It thus happens that larger percentages of inferior pupils in small schools will be passed on the basis of very inferior work than is apt to be the case in larger schools.

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CHAPTER XIII

THE ADAPTATION OF THE HIGH SCHOOL TO THE NEEDS OF ITS PUPILS

GREATER efficiency in our schools is probably the motive of every honest discussion of educational problems. This study of the high-school pupil is no exception. The material here presented would be of small value for the satisfaction of mere idle curiosity; but to one who feels keenly the need of better results in our educational efforts with the boys and girls, this description of the high-school pupil may suggest a number of adaptations on the part of the school.

**Greater efficiency
the aim of our
study**

The question of how the school may be adjusted to secure the best results educationally is, of course, the whole of the educational problem. The aim of this chapter, however, is far less ambitious. Its object is to select a few of the more obvious ways in which the school must needs adjust its plan of work to the boys and girls as it finds them in these adolescent years. This is not a suggestion that the school yield any of its fine ideals to the

weakness of the flesh, but rather that it connect up its efforts with the children as they really are.

It is fairly clear that accurate knowledge of the high-school pupil, physical, mental and social, should precede all theories of how he should be educated. Upon such knowledge, more than upon anything else, does an effective high school depend. Obvious as this may be when one stops to reflect a moment, it is often lost sight of by intelligent people. An efficient high school is apt to be conceived in terms of the excellence of its buildings, laboratories, libraries and even of its scholarly teachers. These factors are of importance, but their importance is not intrinsic. An efficient high school is rather the one which is successful in holding its pupils; in fostering therewith proper life ideals and in developing suitable habits of living. In a word, its worth is to be measured entirely by the degree in which it can actually bring to the pupils as a whole a training which will continue to function in a vital way in their lives after they leave the high school.

Such a training as this is the result, in part, of the studies which the children take; in part, of the material equipment accessory to these studies. But it is even more dependent on certain intimate adaptations to the physical, mental and social characteristics of the pupil during the time he is in high school.

Among these adaptations there are, first of all, those which aim to secure the least wasteful adjustment between the school and the entering pupil. The heaviest elimination occurs in the first year and in the first part of that year. Physiological age, or degree of physical maturity, has, as we have seen, an important bearing on this adjustment. Mature pupils in high school do better work than the immature. This is especially true of the earlier maturing children, as is seen by the fact that those who enter before fourteen are more likely to graduate than those who enter later.

The changing mental attitudes of the teens are also vitally related to success, both at the beginning and throughout the high-school period. As we have seen, the attitudes of the mature boy or girl toward authority and discipline are essentially different from those of little boys and girls. Their intellectual interests are in process of change; their moral sense is developing; their social nature is expanding. All of these are factors which complicate the work of the high school. They make it the more difficult for the pupil to adjust himself to the work which lies before him.

Let us assume, here, that the work itself—that is, the studies—are what they should be, and we do not imply that they are not. Let us simply con-

fine our attention to the means which have been used to help the pupil fit himself with the greatest economy to this work.

As was brought out in Chapter IX, "The High-School Period in Retrospect," pupils experience

The pupils' difficulty in getting started

more or less difficulty in getting started into high school. They often find themselves submerged

in a large and unfamiliar group of children at an age when many are peculiarly sensitive to the matter of associates. Their teachers are strange and they often find it hard to know them personally as they knew their elementary teachers. They are thrown more on their own responsibility both as to time and method in the getting of their lessons. The studies themselves present new difficulties. They are quite different from those which have occupied the pupils in their previous school work. The books are often hard to read or hard to comprehend. The aims of the work seem different, the standards different, the teachers different, and the pupils themselves are different, although they do not know it. Obviously, there must be careful guiding or many of the pupils will get little good out of the work, if they do not, in their discouragement, even drop it altogether.

It appears from the chapter cited in the preceding paragraph, that there is the greatest need for the

Need of friendly relations with teachers

development of a friendly acquaintance between pupils and teachers. Probably there is no

one thing which high-school pupils think more about than their relation to their teachers. They are keenly sensitive of their teachers' attitudes toward them, and, as we have seen, the work of these pupils is definitely influenced for better or worse by the way they regard their teachers and by the way they imagine their teachers regard them. At no stage in a child's school life is his relation to his teachers so important as in the teens. Consequently, all those means which can be used to cultivate friendly relations, respect and confidence between pupils and teachers will do much toward carrying the pupil through the critical first year of his high-school life.

Many high schools have adopted various types of advisory systems to meet these needs. We are frank to say that we believe some **Advisory systems** scheme of this kind, systematically carried out, is of the utmost importance for every truly successful high school. As some one has said, an advisory system is a means of restoring the personal element in the relation of the school to the pupil. Strange that we should ever have let ourselves lose anything so vital as this in adolescent education!

A recent investigation of advisory systems in high schools in the United States(1) brought to light much interesting effort on the part of many schools, and also revealed the fact that a large num-

ber of schools are doing nothing of a definite character along this line.

It would seem that the high school would be greatly helped in its effort to help the pupil get ad-

Importance of preliminary information regarding pupils justed to the new conditions if it should secure from the grammar school a rather complete report of the pupil's record there; not

merely his record as a pupil but a statement of such personal traits as would be of value to the high-school principal and teachers in their first contact with him. A majority of the schools reporting receive no such preliminary information, and, of those receiving it, scarcely more than one-half receive more than the bare scholastic record of the pupils' work in the lower school. About two-thirds only attempt, after the entrance of the pupil, "to get from him or his parent any personal history which would assist the high school in giving wise educational, vocational or personal advice."

As this investigator well says: "If the antecedents of blooded live stock are of such importance as to justify all the pains taken to know the pedigree of the animals, it would seem that the high school, with the help of the grammar school, should do more than these returns indicate to know what kind of animals or human beings it is taking under training." (Condensed.)

It is not strange, with this large neglect to se-

cure information about the pupil, that only about sixty per cent. of all schools reported any definite advisory relations between each pupil and some particular teacher.

The function of the adviser is, as was said above, to preserve, or perhaps even to restore, the personal element in the school. The

**The function of
the high-school
adviser**

degree in which this end is attained varies greatly in different schools maintaining advisers. "The advisership runs all the way from purely routine oversight, record keeping and ordinary discipline . . . to the most intimate and exacting personal, friendly relations with responsibility placed upon the adviser for all phases of the pupil's relations to the school. . . ." The varying quality of the advisory work can also be judged by the number of pupils assigned to a teacher. Where this number is given as twenty-five or thirty, one would expect rather effective oversight for, as one principal writes, "Out of thirty assigned to a teacher, not more than five or six take any great amount of time." (1) But where the number of pupils in charge of one person runs up into the hundreds, we can easily see that the advisory work will be quite casual and superficial.

All of our preceding study has emphasized how much the high-school pupil stands in need of whole-

**Relation of the
adviser to the
parent**

some adult influence and counsel. The parent should be the youth's first adviser, but even where the

relation of parent and child is ideal, advice which the parent is only partly qualified to give is often needed regarding school relationships. After all, it is not so much the advice that is of importance as the personal relationship and interest lying back of it. This is what the high-school pupil needs both at home and in school, and any amount of wise personal influence at home will not compensate for the lack of it at school. In the high-school pupils' reminiscences, quoted in a preceding chapter, it is shown clearly how pupils miss the spirit of friendly interest and advice if it is not present. There can be no question but that better work is done for those teachers and in those schools where kindly and helpful relations between teachers and pupils have been fostered. No one element stands out more distinctly than this in the accounts which young folks give of their life in high school.

The adviser does not, then, seek to supplant the parent adviser where such a one exists. His aim is rather to throw about the pupil in his school life an atmosphere of friendly interest and personal regard which will stimulate him to his best effort. The entering pupil needs discriminating advice as to his studies. There should be some one who makes it a point to see that he adjusts himself to the high-school régime without undue friction. He will need more or less help in learning how to study high-school lessons with economy and effectiveness.

**Matters in which
the pupil needs
counsel**

As he proceeds with his work he may have to be reproved or disciplined, or he may, through inability or neglect, be unable to handle his school tasks. In every such instance the adviser should be the first person to talk the difficulty over with the pupil, and in many cases the evidence of personal interest and concern shown by some one teacher is all that is needed to restore him to a more wholesome frame of mind or to a more thorough determination to do better work.

If the adviser keeps the same group of pupils throughout their course, he will have opportunity to study them carefully and, as the semesters pass, he will find himself able to enter more and more definitely into their lives and give them wise counsel. As his charges reach the later teens he will find his function as an adviser expanding accordingly. All sorts of intellectual, personal, vocational, social, moral and even religious problems will be presented by his pupils, and if he is a teacher of any sincerity and of any depth of character he will be able to do much for them of inestimable value. In the investigation referred to above, one principal reports that his teachers are expected in three or four weeks to know all about the small group of twenty or thirty pupils assigned to them. "They visit homes or send for parents. My teachers think that this takes twenty to twenty-five per cent. of their effort. It pays."

The successful administration of an advisory

system involves careful attention to a number of **Some problems of administration** problems. First of all there is the question of whether the principal shall be able to be the sole adviser or whether the teachers shall assist or assume the duty; in this case, what should be the relation of the principal to the advisory function? Then again, how large groups shall be assigned to each teacher, and how shall the teacher proceed to give his services? Shall it be made to appeal to the pupil as quite informal or unofficial; it not being announced to them that they have been assigned to the charge of particular teachers, or shall the opposite plan prevail? Shall the advisers be especially qualified teachers, relieved of a little class work, or had they best be persons regularly employed for this purpose, and doing little or no teaching? The answers to these questions depend on so many local conditions that general answers would here be unprofitable. They are offered simply as things a principal must think about in developing any system of advisers.

Perhaps an even more important problem than any of the above is that of the personality of the **The personality of the adviser** teachers who are to perform this service. It is not likely that any school has a faculty in which all are equally well qualified for this work, and yet its success depends very largely on the types of teachers who are asked to undertake it. When a principal has decided to inaugurate such a system he must carefully con-

sider which of his teachers are able to do the work. From Raymer's study(1) it appeared that such qualities as judgment, sense, tact, breadth, balance, knowledge of the world, an understanding of the child and knowledge of human nature are more significant than mere scholarship or personal and moral traits.

If acting as an adviser is an important function of the teacher, then these qualities should be con-

**Should teachers
be selected on
this basis?**

sidered in his appointment and promotion. And yet how largely is a teacher's fitness gaged only

by his scholastic attainments and by personal appearance! What we need above all else are those who can be *real teachers of boys and girls*. In how many high schools do we find teachers whose every contact with their pupils is depressing and discouraging. Teachers who are habitually cross, insincere, who speak cynically of life, who are suspicious of their pupils, who have forgot that they themselves were ever children, teachers who are cold, hard, mechanical sorts of beings.

Even if it be contended that such teachers are in the minority, it is a shameful commentary on our regard for the needs of our children that such people are kept in school at all. The public must disabuse its mind of the notion that the schools exist for the good of the teachers. Unflinchingly the standard of highest efficiency in training boys and girls must be upheld. The children in their

teens are they for whom the schools have been built and equipped.

The teacher of adolescents must be thoroughly interested in boys and girls; *he* must be in love with life, as *they* are. If he has found life hard, he must not permit that to embitter him. What Miss Slatery says of the woman teacher is true of the man as well: "The fact that she has met hardships and conquered them, has met sorrow and it has only deepened her sympathy and broadened her outlook on life, makes her a real inspiration to the girls who meet her. . . ."(2)

The following sentences out of a personal letter from Mr. Raymer throw interesting light on the problem of advisers. He writes:

The future of advisory systems "I am unable to see a very high degree of efficiency in advisory systems until the powers in control are willing to pay the price for the right kind of teachers with time to do the work." And further: "The success of any advisory system depends so much on the attitude of the principal of the school that I am inclined to look for results to a new generation of high-school principals who shall have been trained for their work in modern schools of education, and who shall have a somewhat different idea of the social bearings of high-school education than the ideas generally held by those in charge to-day. The right kind of teachers can do very much effective advisory work without the adoption of any definite system

or even pronounced policy by the principal. When such teachers become principals, advisory efforts may become systematized without being made mechanical, and may become effective without being officious or offensive."

Three other important types of effort to adjust the school to the pupil may be briefly mentioned; **Other adjustments** efforts which do not of necessity depend on an advisory system. They are these: development of study programs; supervised study; and conference hours.

These, as will be seen at once, are all attempts to enable the student to handle his studies more effectively. Here is really the central difficulty with much of the work of the school. Failure to be interested in the work or to do it to the satisfaction of the teachers is the opening breach in the wall of many a high-school student's good intentions. If his school work does not really engage his attention and grip his interest, "other things" will, and a survey of our high schools is apt to give one the impression that it is the "other things" rather than what the pupils are supposedly in school for that are tending largely to absorb their energies.

Many discriminating teachers and principals are coming to believe that failure in work is quite as much due to lack of systematic, intelligent effort spent in study as to lack of ability to do the work.

One principal reports good results through the development of study programs. He had study pro-

Study programs gram cards printed with directions for study, and each pupil was required to fill it out and follow it carefully. The results were noticeable. The conduct of the pupils improved, considerable gains were made in scholarship, more systematic habits of home study were built up. (3)

But students in high school need also to be taught *how* to study. It has been found that many pupils' **Teaching pupils** failure to get their lessons is due **how to study** to inattention to their assignments or perhaps to failure to comprehend them. More and more, high schools are realizing the need of pupils doing more of their studying at school under the personal supervision of the various teachers. This necessitates a longer school-day; but that should not be injurious to children in their teens, especially if the getting of lessons at school leaves them freer for recreation outside of school. For detailed accounts of what some schools are doing toward the development of supervised study in school, the reader is referred to articles mentioned at the close of this chapter. (4, 5)

The Pittsburgh high schools report a development called the "Conference Hour." By a slight readjustment among the studies an extra **The "conference hour"** hour per week was secured for certain subjects. No assignments were made for this hour, the time being used largely in attempts to meet individual difficulties, in reviewing hard

points and in discussing and illustrating proper modes of study. The results are reported as very gratifying. (6)

One other possible adaptation may be briefly mentioned. It is that of grouping boys and girls in **The problem of** their middle teens in separate **coeducation** classes or sections. Coeducation in one form or another seems to be the settled policy of secondary education in most sections of our country. The old arguments against coeducation, namely, that the girls were not capable of doing the work, that they were not physically strong enough and that such intimate contact of the sexes would promote early marriages or endanger the morals of boys and girls, have not been supported by experience.

However, new objections against coeducation have arisen. The girls, instead of being less capable than the boys, have usually proved themselves able to do better work. This is in part due to the fact that girls in high school are further developed both physically and mentally than boys of the same age. Most teachers of mixed classes find the girls more ready to do assigned work and more ready to recite in class. The qualities in school work which exert considerable influence on grades, girls, on the whole, excel in. These qualities are neatness, accuracy, excellence of memory, faithfulness in preparation of lessons and readiness to recite. Boys frequently accuse girls of simply studying

for the grades. They find themselves easily out-distanced by the girls, the work itself, especially in language, literature and history, is almost inevitably presented from the point of view most interesting to the girl, the method of the recitation itself is adapted to the more responsive girl. Surely no system could be better devised to render boys disgruntled with their work or to furnish them with an additional incentive to quit it altogether.

The first of the later arguments against coeducation is, then, that the difference in maturity

**The influence of
difference in ma-
turity of boys
and girls**

of the sexes, age for age, in the middle teens is a distinct drawback to their being taught together in the same classes. A second argument against it also has some weight. Coeducation renders difficult the suitable differentiation of studies according to the physical, intellectual and vocational needs of each sex. A third argument is, that coeducation prevents the development of the finer feminine qualities in the girl and the more virile qualities in the boy. And fourthly, that, though the girl may *endure* the strain of work of the ordinary coeducational school, her health may actually be *impaired*.

We shall not attempt here to argue for or against these last three points. The first point, based on the girl's greater maturity, is sufficient to warrant a reconstruction of our whole system of education for the middle teens.

Since it is not likely that any scheme of entirely separate education will ever prove generally acceptable or practicable, it remains to be seen whether some adjustment can be made to the situation under existing conditions. Some high-school men believe that the problem can be solved in a large degree by means of boys' and girls' sections of the same class. According to this plan, the boys and girls attend the same school, mingle together in study rooms and halls but recite in different sections.

A possible adjustment in "segregation" Principal Armstrong of the Englewood High School (Chicago), after several years' trial of this scheme believes it a most desirable adaptation. He contends that there are marked differences in the reaction of the boys and girls in class work. Girls excel in verbal memory, in all sorts of language study, in written work done outside of class; boys are keener observers, especially in the sciences, more logical reasoners, and love to try experiments. "In history, girls do more reference reading and get a better hold on the history of art and customs. Boys profit more by a study of the causes that underlie great historic movements. In mathematics, boys do more original work. It requires more energy on the part of the teacher to secure home work (on the part of the boys). (7, 8) As a result of several years of experience, in this high

school, in teaching boys and girls in separate classes during the first two years of their course, it has been found that many more boys stay in school than formerly, their scholarship has so distinctly improved as to be equal if not superior to that of the girls, and both sexes seem on the whole to be happier in their work. (8)

It is manifest that this plan of "limited segregation" can be worked out only in a large school

**Possible in
large schools**

where it is necessary, in any case,
to section the classes. In smaller

schools the difference in the reaction of the sexes must be met by more skilful and sympathetic teaching. In every such school the supervising officers must be on the alert to see that the methods of instruction do not develop altogether in favor of the girl. The point of view of the just maturing boy must be studied and he must be allowed to work in such a way as not continually to suggest that he is not as capable as the girl. Much of this could be accomplished through the plans of supervised study, referred to above, which many schools are now trying out.

With these brief suggestions as to needful adaptations on the part of the high school to the human nature of boys and girls, the chapter, and with it the volume, may be brought to a close. Not every possible "moral" has been pointed out, nor need it be. The social needs and their suitable satisfaction have not been taken up but they

have been amply treated elsewhere by others, as well as by the present writer. (9, 10)

It is the hope of the writer that these brief chapters, on this most interesting period of life, may lead some readers to a new and profitable interest in the study of the human nature of the high-school pupil.

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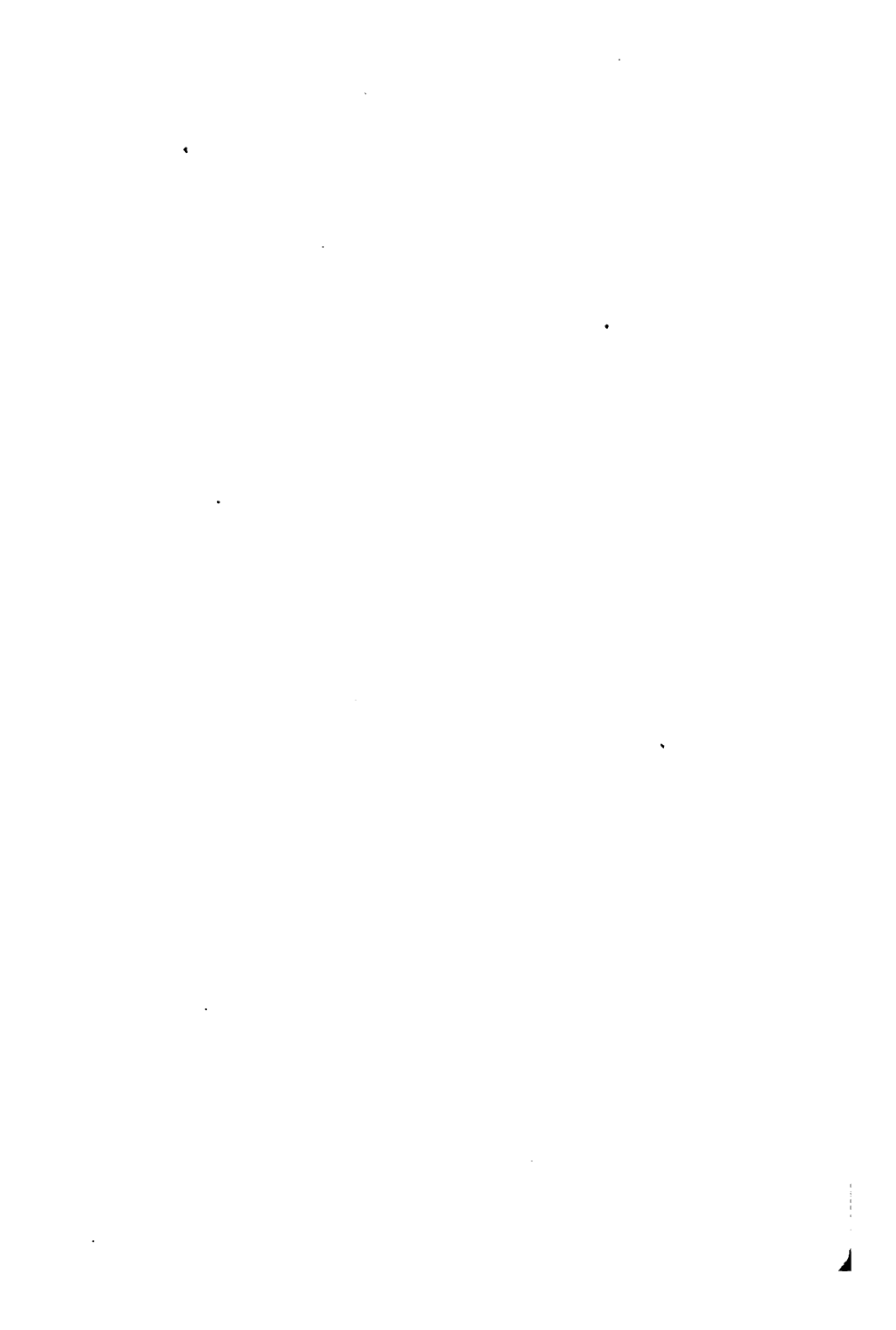
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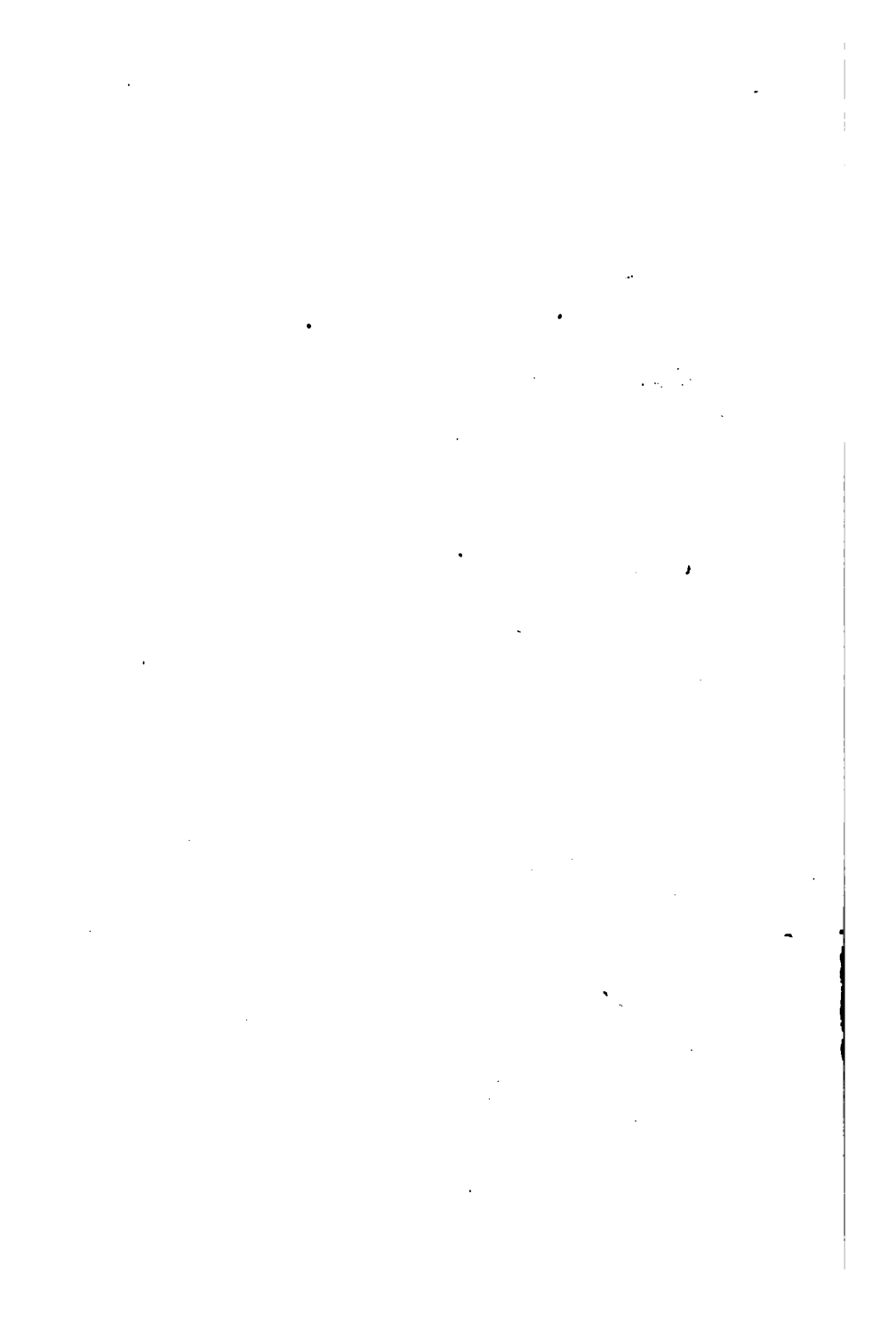
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